

2025

PRODUCT SELECTION GUIDE



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About Us

GigaDevice Semiconductor Inc. is a global leading fabless supplier. GigaDevice was founded in April 2005, with offices in many countries and regions worldwide, providing local support right at customers' fingertips.

GigaDevice's major product lines include Flash memory, 32-bit general-purpose MCUs, intelligent Human-Machine Interface (HMI) sensors, and analog products. GigaDevice offers turnkey solutions for market segments such as automotive, industrial, IoT, network/communications, computing, and consumer.

GigaDevice ranks #2 in the world in SPI NOR Flash, with accumulated shipments of over 27 billion since its inception.

GigaDevice GD32 MCU is a prominent leader in the microcontroller (MCU) market, having shipped over 1.98 billion units and offering a diverse portfolio of 60 series with more than 700 products.

Leading the fingerprint IC industry. Deeply cultivate sensors, signal chain, algorithms and solutions, and be a key contributor to the smart ecosystem.



2005
Established



1059
Patents Granted



20,000+
Customers

GigaDevice has received the ISO26262:2018 automotive functional safety ASIL D certification, IEC 61508 functional safety production certification, as well as ISO9001, ISO14001, ISO45001, and Duns certifications. In a constant quest to expand our technology offering to customers, GigaDevice has also formed strategic alliances with leading foundries, assembly, and test plants to streamline supply chain management.



A leading fabless semiconductor company specializing in memory, MCU, sensor, analog products, and solutions.



TOP10
Ranked in Global 32-bit MCU



TOP2
Ranked in Global SPI NOR Flash

For more details, please visit: www.gigadevice.com

Quality Principle



Quality: Our Responsibility



Product Quality Throughout



Promote a Risk Management Culture

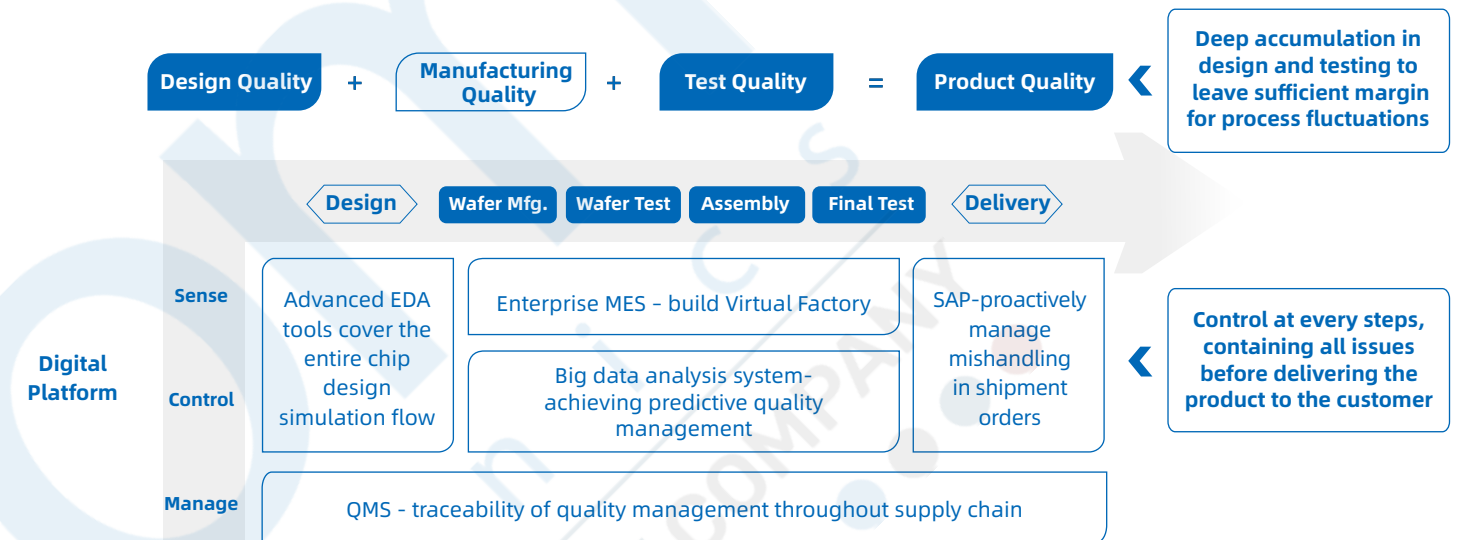


Lessons learned & Continual Improvement



Customer Focus

End-to-End Quality Control



Our Certificates



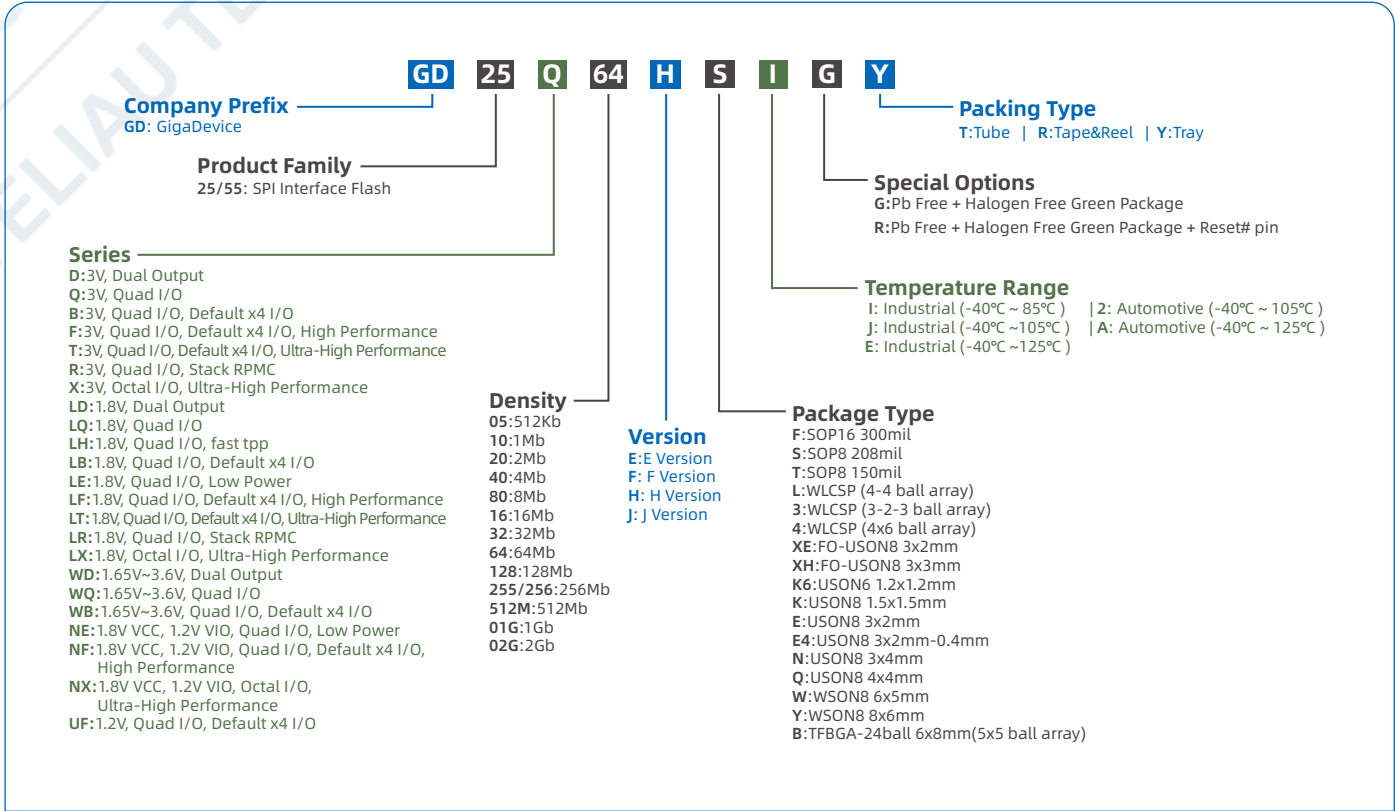
SPI NOR Flash

SPI NOR Flash Features

3V	1.8V	1.65V~3.6V	1.8V VCC&1.2V VIO	1.2V
Single Power Supply Voltage - Voltage range: 2.7V~3.6V High Speed Clock Frequency - Maximum 200MHz for fast read* - Dual I/O Data transfer up to 332Mbit/s - Quad I/O Data transfer up to 664Mbit/s - Octal I/O Data transfer up to 1600Mbit/s - DTR Quad I/O Data transfer up to 1600Mbit/s - DTR Octal I/O Data transfer up to 3200Mbit/s - Continuous read with 8/16/32/64-Byte wrap Flexible Memory Architecture - Sector size: 4K-Byte - Block size: 32/64K-Byte	Single Power Supply Voltage - Voltage range: 1.65V~2.0V High Speed Clock Frequency - Maximum 200MHz for fast read* - Dual I/O Data transfer up to 332Mbit/s - Quad I/O Data transfer up to 664Mbit/s - QPI Data transfer up to 664Mbit/s - Octal I/O Data transfer up to 1600Mbit/s - DTR Quad I/O Data transfer up to 1600Mbit/s - DTR Octal I/O Data transfer up to 3200Mbit/s - Continuous read with 8/16/32/64-Byte wrap Flexible Memory Architecture - Sector size: 4K-Byte - Block size: 32/64K-Byte	Single Power Supply Voltage - Voltage range: 1.65V~3.6V High Speed Clock Frequency - Maximum 104MHz for fast read* - Dual I/O Data transfer up to 208Mbit/s - Quad I/O Data transfer up to 416Mbit/s - ontinuous read with 8/16/32/64-Byte wrap Flexible Memory Architecture - Sector size: 4K-Byte - Block size: 32/64K-Byte	Dual Power Supply Voltage - Core Voltage Range: 1.65V~2.0V - IO Voltage Range: 1.10V~1.30V High Speed Clock Frequency - Maximum 200MHz for fast read* - Dual I/O Data transfer up to 332Mbit/s - Quad I/O Data transfer up to 664Mbit/s - QPI Data transfer up to 664Mbit/s - Octal I/O Data transfer up to 1600Mbit/s - DTR Quad I/O Data transfer up to 832Mbit/s - DTR Octal I/O Data transfer up to 3200Mbit/s - Continuous read with 8/16/32/64-Byte wrap Flexible Memory Architecture - Sector size: 4K-Byte - Block size: 32/64K-Byte	Single Power Supply Voltage - Voltage range: 1.14V~1.26V High Speed Clock Frequency - Maximum 120MHz for fast read* - Dual I/O Data transfer up to 240Mbit/s - Quad I/O Data transfer up to 480Mbit/s - QPI Data transfer up to 480Mbit/s - DTR Quad I/O Data transfer up to 640Mbit/s - Continuous read with 8/16/32/64-Byte wrap Flexible Memory Architecture - Sector size: 4K-Byte - Block size: 32/64K-Byte

* This feature is supported by part of family

SPI NOR Flash Part Number Definition



SPI NOR Flash Features

Flash Voltage	3V							1.8V									1.65V-3.6V			1.8V VCC, 1.2V VIO			1.2V
Family	D	Q	B	F	T	R	X	LD	LQ	LH	LB	LE	LF	LT	LR	LX	WD	WQ	WB	NE	NF	NX	UF
Part No.	xxE	xxE xxH	xxE xxF xxH	xxF	xxE	xxE xxF	xxE	xxE	xxE xxH	xxE	xxE xxF xxH	xxE xxH	xxE xxF xxJ	xxE xxJ	xxE xxF	xxE xxJ	xxE	xxE xxH	xxE	xxH	xxF xxJ	xxJ	xxE
Single I/O (1-1-1)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Dual Output (1-1-2)	•	•	*	•		*		•	•	•	*	•	•		*		•	•	•	•	•		•
Dual I/O (1-2-2)		•	*	•		*			•	•	*	•	•		*			•	•	•	•		•
Quad Output (1-1-4)		•	•	•	•	•			•	•	•	•	•	•	•			•	•	•	•		•
Quad I/O (1-4-4)		•	•	•	•	•			•	•	•	•	•	•	•			•	•	•	•		•
Octal Output (1-1-8)							•									•						•	
Octal I/O (1-8-8)							•									•						•	
QPI (4-4-4)			*		•				•	•	•	•	•	•						•	•		•
OPI (8-8-8)							•									•						•	
DTR		*	*	•	•		•				*	*	•	•		•				•	•	•	•
H/W Reset (RESET# Pin)		*	*	•	•	*	•		*		*	*	*	•	*	•		*	*	•	•	•	*
S/W Reset		•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•	•
H/W Write Protection (WP# Pin)	•	•	*	*	•	*	•	•	•	•	*	•	•	•	*	•	•	•	•	•	•	•	
S/W Write Protection	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Volatile & Non-volatile Status Register Bit		•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•	•
Output Driver Strength		*	*	•	•	*	•		*		*	*	*	•	*	•		*	*	•	•	•	*
Security Registers with OTP Locks	*	•	•	•	•	•	•	*	•	•	•	•	•	•	•	•	*	•	•	•	•	•	•
SFDP Register		•	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•	•	•	•	•
ECC				•	•		•						*	•		•					•	•	

* This feature is supported by part of family

Industrial-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Package
GD25D05E	512Kb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25D10E	1Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25D20E	2Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25Q20E	2Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm
GD25D40E	4Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25Q40E	4Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 1.5x1.5mm USON8 3x2mm
GD25D80E	8Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	SOP8 150mil USON8 1.5x1.5mm USON8 3x2mm
GD25Q80E	8Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm
GD25B80E	8Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil
GD25Q16E	16Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25B16E	16Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25Q32E	32Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25B32E	32Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25Q64E	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil FO-USON8 3x2mm USON8 3x4mm USON8 4x4mm WSON8 6x5mm
GD25Q64H	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 80MHz(DTR)	SOP8 150mil SOP8 208mil FO-USON8 3x2mm USON8 3x4mm USON8 4x4mm WSON8 6x5mm
GD25B64E	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 208mil USON8 3x4mm USON8 4x4mm WSON8 6x5mm
GD25B64H	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 80MHz(DTR)	SOP8 150mil SOP8 208mil FO-USON8 3x2mm USON8 3x4mm USON8 4x4mm WSON8 6x5mm
GD25R64E	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD25F64F	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil USON8 4x4mm WSON8 6x5mm TFBGA24 8x6mm(5x5 ball array)
GD25Q128E	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 208mil SOP16 300mil USON8 4x4mm WSON8 6x5mm WSON8 8x6mm
GD25Q128H	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 80MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x4mm USON8 4x4mm WSON8 6x5mm
GD25B128E	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 208mil USON8 4x4mm WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25B128H	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 80MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x4mm USON8 4x4mm WSON8 6x5mm WSON8 8x6mm
GD25R128E	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD25F128F	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil SOP16 300mil WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25Q256E	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25R256E	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm
GD25B256E	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25F256F	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25B512MF	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25F512MF	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25R512MF	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1,x2,x4)	SOP16 300mil WSON8 8x6mm
GD25T512ME	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25X512ME	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55B01GF	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1,x2,x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55F01GF	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)

Industrial-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Package
GD55T01GE	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55X01GE	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55B02GF	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55F02GF	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1,x2,x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55T02GE	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55X02GE	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LD05E	512Kb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual Output	50MHz(x1) 40MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25LD10E	1Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual Output	50MHz(x1) 40MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25LD20E	2Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual Output	50MHz(x1) 40MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25LQ20E	2Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil USON8 1.5x1.5mm USON8 3x2mm
GD25LE20E	2Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil USON8 1.5x1.5mm USON8 3x2mm
GD25LD40E	4Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual Output	50MHz(x1) 40MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25LQ40E	4Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil USON8 1.5x1.5mm USON8 3x2mm
GD25LH40E	4Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1,x2,x4)	USON8 3x2mm
GD25LE40E	4Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil USON8 1.5x1.5mm USON8 3x2mm
GD25LD80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual Output	50MHz(x1) 40MHz(x2)	SOP8 150mil SOP8 208mil USON8 1.5x1.5mm USON8 3x2mm
GD25LQ80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm
GD25LH80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm
GD25LE80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm WLCSP (4-4 ball array)
GD25LF80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x2mm
GD25LQ16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25LH16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25LB16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm
GD25LE16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm WLCSP (3-2-3 ball array)
GD25LF16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25LQ32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25LH32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25LB32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25LE32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm WLCSP (4-4 ball array) WLCSP (3-2-3 ball array)
GD25LF32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25LR32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LQ64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x4mm USON8 4x4mm WSON8 6x5mm
GD25LB64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x4mm USON8 4x4mm WSON8 6x5mm
GD25LE64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil FO-USON8 3x2mm USON8 3x4mm USON8 4x4mm WSON8 6x5mm WLCSP (4-4 ball array)
GD25LF64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 150mil SOP8 208mil FO-USON8 3x2mm USON8 3x4mm USON8 4x4mm WSON8 6x5mm
GD25LR64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 208mil WSON8 6x5mm
GD25LT64J	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	200MHz(x1,x4) 200MHz(DTR)	SOP8 208mil USON8 4x4mm WSON8 6x5mm TFBGA-24ball (5x5 Ball array)

Industrial-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Package
GD25LX64J	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1,x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LQ128E	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 208mil SOP16 300mil USON8 4x4mm WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LQ128H	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil SOP16 300mil USON8 4x4mm WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LB128E	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 208mil SOP16 300mil USON8 4x4mm WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LB128H	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil SOP16 300mil USON8 4x4mm WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LE128E	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 208mil FO-USON8 3x3mm USON8 4x4mm WSON8 6x5mm WSON8 8x6mm WLCSP (4-4 ball array)
GD25LE128H	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil USON8 4x4mm WSON8 6x5mm WSON8 8x6mm WLCSP (4-4 ball array)
GD25LF128E	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil USON8 4x4mm WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25LR128E	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD25LF128J	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil SOP16 300mil USON8 4x4mm WSON8 6x5mm WSON8 8x6mm TFBGA-24ball (5x5 Ball array)
GD25LX128J	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1,x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LQ255E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm
GD25LQ256H	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD25LB256F	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LE255E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	WSON8 6x5mm WLCSP (4-4 ball array)
GD25LE256H	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	WSON8 6x5mm WLCSP (4-4 ball array)
GD25LF255E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	WSON8 6x5mm WLCSP (4-4 ball array)
GD25LF256F	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LT256E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LR256F	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	WSON8 6x5mm WSON8 8x6mm
GD25LX256E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array) WLCSP (4x6 ball array)
GD25LB512MF	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LF512MF	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LT512ME	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LR512MF	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm
GD25LX512ME	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array) WLCSP (4x6 ball array)
GD55LB01GF	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LF01GF	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LT01GE	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LR01GF	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LX01GE	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55LB02GF	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55LF02GF	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55LT02GE	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55LX02GE	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25WD05E	512Kb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm

Industrial-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Package
GD25WD10E	1Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25WD20E	2Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25WQ20E	2Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 150mil USON8 3x2mm
GD25WD40E	4Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	SOP8 150mil USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm
GD25WQ40E	4Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 150mil USON8 3x2mm
GD25WD80E	8Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	SOP8 150mil SOP8 208mil USON8 1.5x1.5mm USON8 3x2mm
GD25WQ80E	8Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm
GD25WQ16E	16Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25WQ32E	32Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25WQ64E	64Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x4mm USON8 4x4mm WSON8 6x5mm WLCSP (3-2-3 ball array)
GD25WQ64H	64Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil FO-USON8 3x2mm USON8 3x4mm USON8 4x4mm WSON8 6x5mm
GD25WQ128E	128Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 208mil SOP16 300mil USON8 4x4mm WSON8 6x5mm
GD25WQ128H	128Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x4mm USON8 4x4mm WSON8 6x5mm
GD25WB256E	256Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm
GD25NX64J	64Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1,x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25NX128J	128Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1,x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25NE128H	128Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25NE256H	256Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25NF256F	256Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25NF512MF	512Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25UF80E	8Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4) 60MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x2mm
GD25UF16E	16Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4) 60MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25UF32E	32Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4) 60MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25UF64E	64Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	120MHz(x1, x2, x4) 80MHz(DTR)	SOP8 208mil USON8 3x4mm USON8 4x4mm WLCSP(4-4 ball array)
GD25UF128E	128Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	120MHz(x1, x2, x4) 80MHz(DTR)	SOP8 208mil USON8 4x4mm WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25UF256E	256Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	120MHz(x1, x2, x4) 80MHz(DTR)	WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)

Product Series

3V

D: Dual Output
Q: Quad I/O
B: Quad I/O, Default x4 I/O
F: Quad I/O, Default x4 I/O, High Performance, ECC
T: Quad I/O, Default x4 I/O, Ultra-High Performance, ECC
R: Quad I/O, Stack RPMC
X: Octal I/O, Ultra-High Performance, ECC

1.8V

LD: Dual Output
LQ: Quad I/O
LH: Quad I/O, fast tpp
LB: Quad I/O, Default x4 I/O
LE: Quad I/O, Low Power
LF: Quad I/O, Default x4 I/O, High Performance, ECC*
LT: Quad I/O, Default x4 I/O, Ultra-High Performance, ECC
LR: Quad I/O, Stack RPMC
LX: Octal I/O, Ultra-High Performance, ECC

1.65V~3.6V

WD: Dual Output
WQ: Quad I/O
WB: Quad I/O, Default x4 I/O

1.8V VCC, 1.2V VIO

NE: 1.2V VIO, Quad I/O, Low Power
NF: 1.2V VIO, Quad I/O, Default x4 I/O, High Performance, ECC
NX: 1.2V VIO, Octal I/O, Ultra-High Performance, ECC

1.2V

UF: Quad I/O, Default x4 I/O



*Supported only by versions F and J

Automotive-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Packages
GD25Q20E	2Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil USON8 3x2mm
GD25Q40E	4Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil USON8 3x2mm
GD25Q80E	8Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm
GD25B16E	16Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25B32E	32Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm TFBGA24 8x6mm (5x5 ball array)
GD25F64F	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil USON8 4x4mm WSON8 6x5mm TFBGA-24ball (5x5 Ball array)
GD25F128F	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25F256F	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25F512MF	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25T512ME	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25X512ME	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55F01GF	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1,x2,x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55T01GE	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55X01GE	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55F02GF	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1,x2,x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55T02GE	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55X02GE	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LQ20E	2Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm
GD25LQ40E	4Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm
GD25LQ80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil USON8 3x2mm
GD25LF80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x2mm
GD25LQ16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25LF16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x2mm
GD25LQ32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm WSON8 6x5mm
GD25LF32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x2mm USON8 3x4mm
GD25LQ64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil USON8 3x4mm USON8 4x4mm WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25LF64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 150mil SOP8 208mil USON8 3x4mm USON8 4x4mm WSON8 6x5mm

Automotive-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Packages
GD25LT64J	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	200MHz(x1,x4) 200MHz(DTR)	SOP8 208mil USON8 4x4mm WSON8 6x5mm TFBGA-24ball (5x5 Ball array)
GD25LX64J	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1,x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LF128J	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil SOP16 300mil USON8 4x4mm WSON8 6x5mm WSON8 8x6mm TFBGA-24ball (5x5 Ball array)
GD25LX128J	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1,x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LT256E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LX256E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25LF256F	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LT512ME	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LX512ME	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25LF512MF	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single /Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LT01GE	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LX01GE	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55LF01GF	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single /Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LT02GE	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55LX02GE	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55LF02GF	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)

Product Series

3V

Q: Quad I/O
B: Quad I/O, Default x4 I/O
F: Quad I/O, Default x4 I/O, High Performance, ECC
T: Quad I/O, Default x4 I/O, Ultra-High Performance, ECC
X: Octal I/O, Ultra-High Performance, ECC

1.8V

LQ: Quad I/O
LF: Quad I/O, Default x4 I/O, High Performance, ECC*
LT: Quad I/O, Default x4 I/O, Ultra-High Performance, ECC
LX: Octal I/O, Ultra-High Performance, ECC



*Supported only by versions F and J

SPI NAND Flash

SPI NAND Flash Features

1.8V

Power Supply Voltage

- 1.7V~2.0V

Density

- 1Gb/2Gb/4Gb

High Speed Clock Frequency

- 133MHz/104MHz/80MHz

Flexible Memory Architecture

- 2K-Byte page for read and program
- 128K-Byte per block for erase

Temperature Grade

- Industrial -40°C~85°C/Industrial -40°C~105°C/
Automotive -40°C~105°C

Advanced Feature for SPI NAND

- Internal ECC algorithm
- Support DTR
- Support Continuous Read/Cache Read (M9 Series)
- Support Deep Power Down

3V

Power Supply Voltage

- 2.7V~3.6V

Density

- 1Gb/2Gb/4Gb

High Speed Clock Frequency

- 166MHz/133MHz/104MHz

Flexible Memory Architecture

- 2K-Byte page for read and program
- 128K-Byte per block for erase

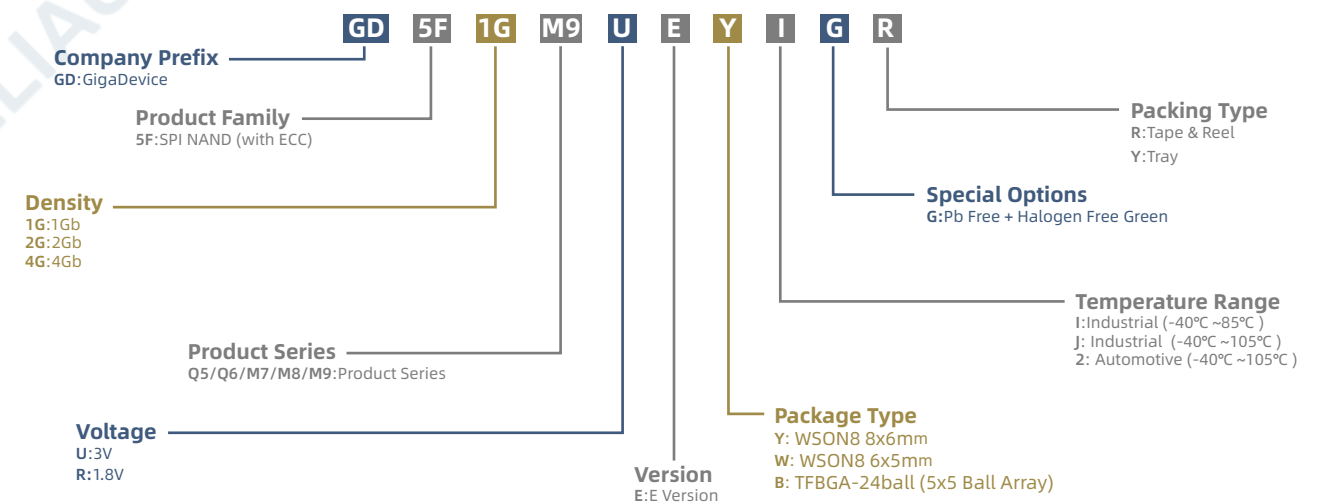
Temperature Grade

- Industrial -40°C~85°C/Industrial -40°C~105°C/
Automotive -40°C~105°C

Advanced Feature for SPI NAND

- Internal ECC algorithm
- Support DTR
- Support Continuous Read/Cache Read (M9 Series)

SPI NAND Flash Part Number Definition



Industrial-Grade SPI NAND Flash Selection Guide

Part No.	Density	Voltage	Frequency	I/O Bus	Page Size	Package
GD5F1GQ5UE	1Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F1GM7UE	1Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WS0N8 8x6mm/WS0N8 6x5mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F1GM9UE	1Gb	2.7V-3.6V	166MHz	x1/x2/x4	2KB	WS0N8 8x6mm/WS0N8 6x5mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F2GQ5UE	2Gb	2.7V-3.6V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F2GM7UE	2Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WS0N8 8x6mm/WS0N8 6x5mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F4GQ6UE	4Gb	2.7V-3.6V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F4GM8UE	4Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WS0N8 8x6mm/WS0N8 6x5mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F1GQ5RE	1Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F1GM7RE	1Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm/WS0N8 6x5mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F1GM9RE	1Gb	1.7V-2.0V	133MHz	x1/x2/x4	2KB	WS0N8 8x6mm/WS0N8 6x5mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F2GQ5RE	2Gb	1.7V-2.0V	80MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F2GM7RE	2Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm/WS0N8 6x5mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F4GQ6RE	4Gb	1.7V-2.0V	80MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F4GM8RE	4Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm/WS0N8 6x5mm/ TFBGA24 8x6mm(5x5 ball array)

Automotive-Grade SPI NAND Flash Selection Guide

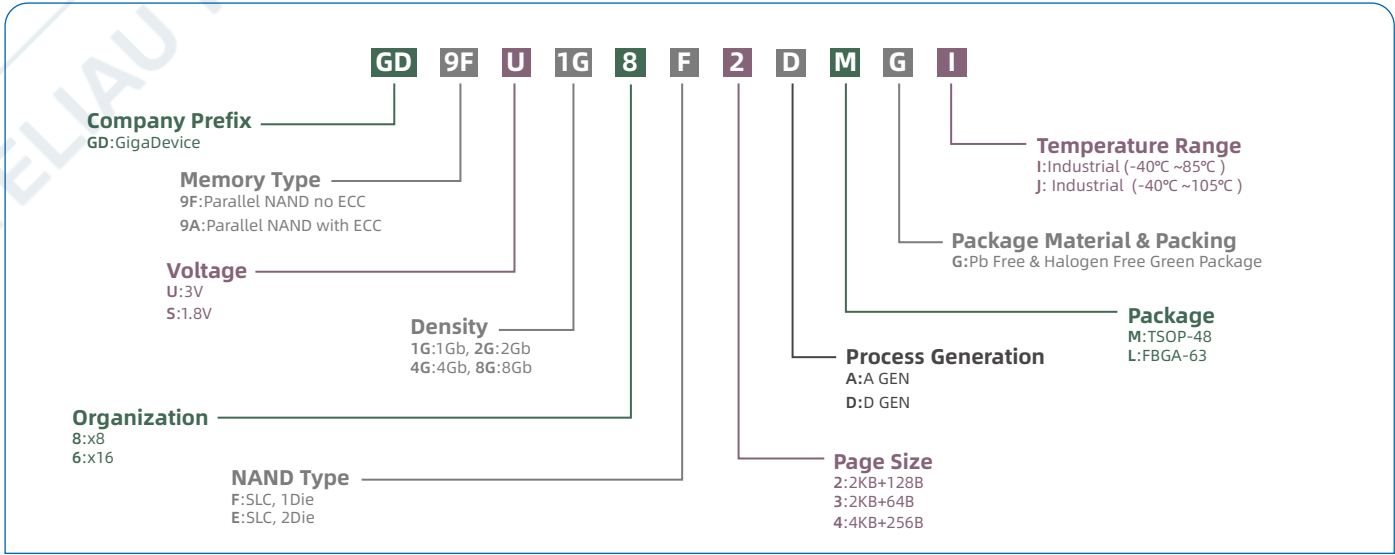
Part No.	Density	Voltage	Frequency	I/O Bus	Page Size	Package
GD5F1GQ5UE	1Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F1GM7UE	1Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WS0N8 8x6mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F2GQ5UE	2Gb	2.7V-3.6V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F2GM7UE	2Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WS0N8 8x6mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F4GQ6UE	4Gb	2.7V-3.6V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F4GM8UE	4Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WS0N8 8x6mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F1GQ5RE	1Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F1GM7RE	1Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F2GQ5RE	2Gb	1.7V-2.0V	80MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F2GM7RE	2Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm/ TFBGA24 8x6mm(5x5 ball array)
GD5F4GQ6RE	4Gb	1.7V-2.0V	80MHz	x1/x2/x4	2KB	WS0N8 8x6mm
GD5F4GM8RE	4Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WS0N8 8x6mm/ TFBGA24 8x6mm(5x5 ball array)

Parallel NAND Flash

Parallel NAND Flash Features

1.8V	3V
Power Supply Voltage • 1.7V~1.95V	Power Supply Voltage • 2.7V~3.6V
Density • 1Gb/2Gb/4Gb/8Gb	Density • 1Gb/2Gb/4Gb/8Gb
Page Size • 2KB+64B/2KB+128B/4KB+256B	Page Size • 2KB+64B/2KB+128B/4KB+256B
Flash Array to Register Time • 25µs	Flash Array to Register Time • 25µs
I/O Read Performance • 20ns/25ns/45ns	I/O Read Performance • 12ns/20ns/25ns
Bus Width • x8/x16	Bus Width • x8/x16
Temperature Grade • Industrial-40°C~85°C/Industrial-40°C~105°C	Temperature Grade • Industrial-40°C~85°C/Industrial-40°C~105°C
ONFI1.0 compatible	ONFI1.0 compatible

Parallel NAND Flash Part Number Definition



Industrial-Grade Parallel NAND Flash Selection Guide

Part No.	Density	Voltage	Sequential Access Time	I/O Bus	Page Size	ECC Requirement	Package
GD9FU1G8F2D	1Gb	2.7V-3.6V	12ns	x8	2KB+128B	8bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU2GxF3A	2Gb	2.7V-3.6V	20ns	x8/x16	2KB+64B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU2GxF2A	2Gb	2.7V-3.6V	20ns	x8/x16	2KB+128B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU4GxF3A	4Gb	2.7V-3.6V	20ns	x8/x16	2KB+64B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU4G8F4D	4Gb	2.7V-3.6V	12ns	x8	4KB+256B	8bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU8GxE3A	8Gb	2.7V-3.6V	20ns	x8/x16	2KB+64B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU8G8E4D	8Gb	2.7V-3.6V	12ns	x8	4KB+256B	8bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9AU2GxF3A	2Gb	2.7V-3.6V	20ns	x8/x16	2KB+64B	Internal 4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9AU4GxF3A	4Gb	2.7V-3.6V	20ns	x8/x16	2KB+64B	Internal 4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9AU8GxE3A	8Gb	2.7V-3.6V	20ns	x8/x16	2KB+64B	Internal 4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9F51G8F2D	1Gb	1.7V-1.95V	20ns	x8	2KB+128B	8bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9F52GxF3A	2Gb	1.7V-1.95V	25ns	x8/x16	2KB+64B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9F52GxF2A	2Gb	1.7V-1.95V	25ns	x8/x16	2KB+128B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9F54GxF3A	4Gb	1.7V-1.95V	25ns	x8/x16	2KB+64B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9F54G8F4D	4Gb	1.7V-1.95V	20ns	x8	4KB+256B	8bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9F58GxE3A	8Gb	1.7V-1.95V	25ns	x8/x16	2KB+64B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9F58G8E4D	8Gb	1.7V-1.95V	20ns	x8	4KB+256B	8bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9AS2GxF3A	2Gb	1.7V-1.95V	25ns	x8/x16	2KB+64B	Internal 4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9AS4GxF3A	4Gb	1.7V-1.95V	25ns	x8/x16	2KB+64B	Internal 4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9AS8GxE3A	8Gb	1.7V-1.95V	25ns	x8/x16	2KB+64B	Internal 4bit/512B	TSOP48 20x12mm/BGA63 9x11mm

Flash Package Options

Note:
1. The values provided are the typical values for length, width and pitch, as well as the max values for Height.
2. The pictures are for reference only. Please always verify your selection with the product data sheet.

T



SOP8 150mil

Length	4.90mm
Width	6.00mm
Height (Max)	1.75mm
Pitch	1.27mm

S



SOP8 208mil

Length	5.23mm
Width	7.90mm
Height (Max)	2.16mm
Pitch	1.27mm

F



SOP16 300mil

Length	10.30mm
Width	10.35mm
Height (Max)	2.65mm
Pitch	1.27mm

N



USON8 3x4mm

Length	3.00mm
Width	4.00mm
Height (Max)	0.60mm
Pitch	0.80mm

Q



USON8 4x4mm

Length	4.00mm
Width	4.00mm
Height (Max)	0.50mm
Pitch	0.80mm

W



WSON8 6x5mm

Length	6.00mm
Width	5.00mm
Height (Max)	0.80mm
Pitch	1.27mm

K6



USON6 1.2x1.2mm

Length	1.20mm
Width	1.20mm
Height (Max)	0.40mm
Pitch	0.40mm

K



USON8 1.5x1.5mm

Length	1.50mm
Width	1.50mm
Height (Max)	0.50mm
Pitch	0.40mm

XE



F0-USON8 3x2mm

Length	3.00mm
Width	2.00mm
Height (Max)	0.40mm
Pitch	0.50mm

Y



WSON8 8x6mm

Length	8.00mm
Width	6.00mm
Height (Max)	0.80mm
Pitch	1.27mm

L/3/4



WLCSP

Depends on specific product	
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B



TFBGA-24ball 6x8mm (5x5ball array)

Length	6.00mm
Width	8.00mm
Height (Max)	1.20mm
Pitch	1.00mm

E



USON8 3x2mm

Length	3.00mm
Width	2.00mm
Height (Max)	0.50mm
Pitch	0.50mm

E4



USON8 3x2mm-0.4mm

Length	3.00mm
Width	2.00mm
Height (Max)	0.40mm
Pitch	0.50mm

XH



F0-USON8 3x3mm

Length	3.00mm
Width	3.00mm
Height (Max)	0.40mm
Pitch	0.80mm

L



FBGA63

Length	9.00mm
Width	11.00mm
Height (Max)	1.00mm
Pitch	0.80mm

M



TSOP48

Length	20.00mm
Width	12.00mm
Height (Max)	1.20mm
Pitch	0.50mm

GD32 MCU Family

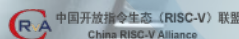
Core Type	Arm® Cortex®-M 32-bit MCUs (Flash KB/RAM KB)						RISC-V MCUs	
	Cortex®-M23	Cortex®-M3	Cortex®-M4		Cortex®-M33		Cortex®-M7	RISC-V
High-Performance		GD32F207 120MHz, 3M/256K	GD32F470 240MHz, 3M/768K	GD32F450 200MHz, 3M/512K	GD32G553 216MHz, 512K/128K	GD32F527 200MHz, 7.5M/1M	GD32H75E 600MHz, 3840K/1024K	
		GD32F205 120MHz, 3M/256K	GD32F427 200MHz, 3M/256K	GD32F425 200MHz, 3M/256K	GD32E518 180MHz, 512K/128K	GD32E517 180MHz, 512K/128K	GD32H759 600MHz, 3840K/1024K	
			GD32F407 168MHz, 3M/192K	GD32F405 168MHz, 3M/192K	GD32E513 180MHz, 512K/128K	GD32E508 180MHz, 512K/128K	GD32H757 600MHz, 3840K/1024K	
			GD32F403 168MHz, 3M/128K		GD32E507 180MHz, 512K/128K	GD32E505 180MHz, 512K/128K	GD32H737 600MHz, 3840K/1024K	
					GD32E503 180MHz, 512K/128K			
Main-Stream		GD32F107 108MHz, 1M/96K	GD32F307 120MHz, 1M/96K	GD32F305 120MHz, 1M/96K	GD32E502 100MHz, 384K/48K			GD32VF103 120MHz, 128K/32K
		GD32F105 108MHz, 1M/96K	GD32F303 120MHz, 3M/96K	GD32C113 120MHz, 128K/32K				
		GD32F103 108MHz, 3M/96K	GD32E113 120MHz, 128K/32K	GD32C103 120MHz, 128K/32K				
		GD32F101 56MHz, 3M/80K	GD32E103 120MHz, 128K/32K					
Entry-Level	GD32E235 72MHz, 128K/16K	GD32F150 72MHz, 64K/8K	GD32F350 108MHz, 128K/16K	GD32F330 84MHz, 128K/16K				
	GD32E230 72MHz, 64K/8K	GD32F130 48MHz, 64K/8K	GD32F310 72MHz, 64K/8K					
Low-Power Consumption	GD32L235 64MHz, 128K/24K							
	GD32L233 64MHz, 256K/32K							
Wireless					GD32W515 180MHz, 2048K/448K			GD32VW553 160MHz, 4M/320K
Automotive					GD32A513 100MHz, 384K/48K	GD32A503 100MHz, 384K/48K	GD32A74x 160MHz, Lockstep core	
							GD32A72x 160MHz, Dual core	
							GD32A71x 160MHz, Single core	
Specific	GD32E232 72MHz, 64K/8K		GD32FFPR 168MHz, 1M/128K		GD32E501 100MHz, 512K/32K	GD32EPRT 168MHz, 384K/96K+4M		

GD32 MCU

arm CORTEX

arm Community

arm University Program



High-Performance MCU

GD32H7 Series 32-bit Arm® Cortex®-M7 High-Performance MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer								Connectivity													EXMC	Analog Interface				Package
			Flash	SRAM		GPTM (16bit)	GPTM (32bit)	Ad- vanced TM (16bit)	Basic TM (32bit)	Basic TM (64bit)	SysTick (24bit)	WDG	RTC	U(S) ART	I²C	SPI	OSPI	CAN 2.0B	I²S	USB OTG	Ethernet	EtherCAT Slave Controller (ESC)	SDIO	LCD-TFT	SAI	14bit ADC Units (CHs)		12bit ADC Units (CHs)	12bit DAC Units	COMP		
GD32H737	GD32H737VGT6	600	1024K	1024K	up to 78	10	4	2	2	2	1	2	1	8	4	5	1	2	4	1	1		2		2	•	1(14), 1(12)	1(4)	1	2	LQFP100	
	GD32H737VIT6	600	2048K	1024K	up to 78	10	4	2	2	2	1	2	1	8	4	5	1	3	4	1	1		2	1	2	•	1(14), 1(12)	1(4)	1	2	LQFP100	
	GD32H737VMT6	600	3840K	1024K	up to 78	10	4	2	2	2	1	2	1	8	4	5	1	3	4	1	1		2	1	2	•	1(14), 1(12)	1(4)	1	2	LQFP100	
	GD32H737ZGT6	600	1024K	1024K	up to 110	12	4	2	2	2	1	2	1	8	4	6	2	2	4	1	1		2		3	•	1(16), 1(14)	1(12)	1	2	LQFP144	
	GD32H737ZIT6	600	2048K	1024K	up to 110	12	4	2	2	2	1	2	1	8	4	6	2	3	4	1	1		2	1	3	•	1(16), 1(14)	1(12)	1	2	LQFP144	
	GD32H737ZMT6	600	3840K	1024K	up to 110	12	4	2	2	2	1	2	1	8	4	6	2	3	4	1	1		2	1	3	•	1(16), 1(14)	1(12)	1	2	LQFP144	
	GD32H737IGT6	600	1024K	1024K	up to 115	12	4	2	2	2	1	2	1	8	4	6	2	2	4	2	1		2		3	•	1(16), 1(14)	1(12)	1	2	LQFP176	
	GD32H737IIT6	600	2048K	1024K	up to 115	12	4	2	2	2	1	2	1	8	4	6	2	3	4	2	1		2	1	3	•	1(16), 1(14)	1(12)	1	2	LQFP176	
	GD32H737IMT6	600	3840K	1024K	up to 115	12	4	2	2	2	1	2	1	8	4	6	2	3	4	2	1		2	1	3	•	1(16), 1(14)	1(12)	1	2	LQFP176	
	GD32H737IGK6	600	1024K	1024K	up to 124	12	4	2	2	2	1	2	1	8	4	6	2	2	4	2	2		2		3	•	1(20), 1(18)	1(17)	1	2	BGA176	
	GD32H737IIK6	600	2048K	1024K	up to 124	12	4	2	2	2	1	2	1	8	4	6	2	3	4	2	2		2	1	3	•	1(20), 1(18)	1(17)	1	2	BGA176	
GD32H737IMK6	600	3840K	1024K	up to 124	12	4	2	2	2	1	2	1	8	4	6	2	3	4	2	2		2	1	3	•	1(20), 1(18)	1(17)	1	2	BGA176		
GD32H757	GD32H757VGT6	600	1024K	1024K	up to 78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1	2	•	1(14), 1(12)	1(4)	1	2	LQFP100	
	GD32H757VIT6	600	2048K	1024K	up to 78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1	2	•	1(14), 1(12)	1(4)	1	2	LQFP100	
	GD32H757VMT6	600	3840K	1024K	up to 78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1	2	•	1(14), 1(12)	1(4)	1	2	LQFP100	
	GD32H757VGJ6	600	1024K	1024K	up to 78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1	2	•	1(14), 1(12)	1(4)	1	2	BGA100	
	GD32H757VIJ6	600	2048K	1024K	up to 78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1	2	•	1(14), 1(12)	1(4)	1	2	BGA100	
	GD32H757VMJ6	600	3840K	1024K	up to 78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1	2	•	1(14), 1(12)	1(4)	1	2	BGA100	
	GD32H757ZGT6	600	1024K	1024K	up to 110	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	1	1		2	1	3	•	1(16), 1(14)	1(12)	1	2	LQFP144	
	GD32H757ZIT6	600	2048K	1024K	up to 110	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	1	1		2	1	3	•	1(16), 1(14)	1(12)	1	2	LQFP144	
	GD32H757ZMT6	600	3840K	1024K	up to 110	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	1	1		2	1	3	•	1(16), 1(14)	1(12)	1	2	LQFP144	
GD32H759	GD32H759IGT6	600	1024K	1024K	up to 115	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	1		2	1	3	•	1(16), 1(14)	1(12)	1	2	LQFP176	
	GD32H759IIT6	600	2048K	1024K	up to 115	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	1		2	1	3	•	1(16), 1(14)	1(12)	1	2	LQFP176	
	GD32H759IMT6	600	3840K	1024K	up to 115	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	1		2	1	3	•	1(16), 1(14)	1(12)	1	2	LQFP176	
	GD32H759IGK6	600	1024K	1024K	up to 124	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	2		2	1	3	•	1(20), 1(18)	1(17)	1	2	BGA176	
	GD32H759IIK6	600	2048K	1024K	up to 124	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	2		2	1	3	•	1(20), 1(18)	1(17)	1	2	BGA176	
	GD32H759IMK6	600	3840K	1024K	up to 124	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	2		2	1	3	•	1(20), 1(18)	1(17)	1	2	BGA176	
GD32H75E	GD32H75EYMJ6	600	3840K	1024K	up to 116	10	4	2	2	2	1	2	1	8	4	6	1	3xFD	4	2	2xPHY	1				•	2(22)	1(15)	1	2	BGA240	
	GD32H75EYMJ6B	600	3840K	1024K	up to 113	9	3	2	2	2	1	2	1	8	4	6	1	3xFD	4	2	0	1				•	2(20)	1(15)	1	2	BGA240	

High-Performance MCU

GD32G5 Series 32-bit Arm® Cortex®-M33 High-Performance MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer									Connectivity								EXMC	AES/DES	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	GPTM (32bit)	LPTM (16bit)	HRTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART	I²C	SPI	QSPI	CAN	COMP	TRIGSEL	12bit ADC Units(CHs)			12bit DAC Units		
GD32G553	GD32G553CCU7	216	256K	128K	up to 43	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	7	1	•	4(21)	8	QFN48		
	GD32G553CEU7	216	512K	128K	up to 43	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	7	1	•	4(21)	8	QFN48		
	GD32G553CCT7	216	256K	128K	up to 39	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	7	1	•	4(20)	8	LQFP48		
	GD32G553CET7	216	512K	128K	up to 39	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	7	1	•	4(20)	8	LQFP48		
	GD32G553RCT7	216	256K	128K	up to 52	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	7	1	•	4(26)	8	LQFP64		
	GD32G553RET7	216	512K	128K	up to 52	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	7	1	•	4(26)	8	LQFP64		
	GD32G553MCT7	216	256K	128K	up to 66	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	8	1	1	•	4(38)	8	LQFP80	
	GD32G553MET7	216	512K	128K	up to 66	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	8	1	1	•	4(38)	8	LQFP80	
	GD32G553MCY7TR	216	256K	128K	up to 66	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	8	1	1	•	4(39)	8	WLCSP81	
	GD32G553MEY7TR	216	512K	128K	up to 66	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	8	1	1	•	4(39)	8	WLCSP81	
	GD32G553VCT7	216	256K	128K	up to 86	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	8	1	1	•	4(42)	8	LQFP100	
	GD32G553VET7	216	512K	128K	up to 86	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	8	1	1	•	4(42)	8	LQFP100	
	GD32G553QCT7	216	256K	128K	up to 107	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	8	1	1	•	4(42)	8	LQFP128	
	GD32G553QET7	216	512K	128K	up to 107	5	2	1	1	3	2	1	2	1	3+2	4	3	1	3xFD	8	1	1	•	4(42)	8	LQFP128	

GD32F5 Series 32-bit Arm® Cortex®-M33 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)			I/O	Timer						Connectivity												EXMC/SDRAM	Analog Interface		Package
			Flash	Code-Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Basic TM (16bit)	WDG	RTC	U(S)ART /LIN	I²C	SPI	CAN 2.0B	USB OTG	I²S	SDIO	SAI	LCD- TFT	Camera	Ethernet	IPA		12bit ADC Units (CHs)	12bit DAC Units	
GD32F527	GD32F527RMT7	200	4096K	1536K	1088K	up to 51	8	2	2	2	2	1	4+2	3	3	2xFD	FS+HS	2	1	0	0	1	1	0		3(16)	2	LQFP64
	GD32F527RST7	200	7680K	2048K	576K	up to 51	8	2	2	2	2	1	4+2	3	3	2xFD	FS+HS	2	1	0	0	1	1	0		3(16)	2	LQFP64
	GD32F527VMT7	200	4096K	1536K	1088K	up to 82	8	2	2	2	2	1	4+4	3	5	2xFD	FS+HS	2	1	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F527VST7	200	7680K	2048K	576K	up to 82	8	2	2	2	2	1	4+4	3	5	2xFD	FS+HS	2	1	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F527ZMT7	200	4096K	1536K	1088K	up to 114	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F527ZST7	200	7680K	2048K	576K	up to 114	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F527IMT7	200	4096K	1536K	1088K	up to 140	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	LQFP176
	GD32F527IST7	200	7680K	2048K	576K	up to 140	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	LQFP176
	GD32F527IMK7	200	4096K	1536K	1088K	up to 140	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	BGA176
	GD32F527ISK7	200	7680K	2048K	576K	up to 140	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	BGA176

High-Performance MCU

GD32F4 Series 32-bit Arm® Cortex®-M4 High-Performance MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity											EXMC/SDRAM	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Basic TM (16bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB OTG	I²S	SDIO	LCD- SDIO TFT	Camera	ETH MAC	IPA		12bit ADC Units (CHs)	12bit DAC Units	
GD32F425	GD32F425RET6	200	512K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP64
	GD32F425RGT6	200	1024K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP64
	GD32F425RKT6	200	3072K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP64
	GD32F425VGT6	200	1024K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP100
	GD32F425VKT6	200	3072K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP100
	GD32F425VGH6	200	1024K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	BGA100
	GD32F425VKH6	200	3072K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	BGA100
	GD32F425ZGT6	200	1024K	256K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(24)	2	LQFP144
	GD32F425ZKT6	200	3072K	256K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(24)	2	LQFP144
GD32F427	GD32F427RET6	200	512K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F427RGT6	200	1024K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F427RKT6	200	3072K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F427VET6	200	512K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F427VGT6	200	1024K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F427VKT6	200	3072K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F427VEH6	200	512K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F427VGH6	200	1024K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F427VKH6	200	3072K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F427ZET6	200	512K	256K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F427ZGT6	200	1024K	256K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F427ZKT6	200	3072K	256K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F427IEH6	200	512K	256K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
	GD32F427IGH6	200	1024K	256K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
	GD32F427IKH6	200	3072K	256K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
	GD32F470VET6	240	512K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F470VGT6	240	1024K	512K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
GD32F470	GD32F470VIT6	240	2048K	768K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F470VKT6	240	3072K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F470VGH6	240	1024K	512K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	BGA100
	GD32F470VIH6	240	2048K	768K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	BGA100
	GD32F470VKH6	240	3072K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	BGA100
	GD32F470ZET6	240	512K	256K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F470ZGT6	240	1024K	512K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F470ZIT6	240	2048K	768K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F470ZKT6	240	3072K	256K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F470IGH6	240	1024K	512K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176
	GD32F470IIH6	240	2048K	768K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176
	GD32F470IKH6	240	3072K	256K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176

High-Performance MCU

GD32F4 Series 32-bit Arm® Cortex®-M4 High-Performance MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity											EXMC/SDRAM	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Basic TM (16bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB OTG	I²S	SDIO	LCD- SDIO TFT	Camera	ETH MAC	IPA		12bit ADC Units (CHs)	12bit DAC Units	
GD32F403	GD32F403RCT6	168	256K	64K	up to 51	8	2		2	2	1	3+2	2	3	2	OTG	2	1					0/0	3(16)	2	LQFP64
	GD32F403RET6	168	512K	96K	up to 51	8	2		2	2	1	3+2	2	3	2	OTG	2	1					0/0	3(16)	2	LQFP64
	GD32F403RGT6	168	1024K	128K	up to 51	8	2		2	2	1	3+2	2	3	2	OTG	2	1					0/0	3(16)	2	LQFP64
	GD32F403RIT6	168	2048K	128K	up to 51	8	2		2	2	1	3+2	2	3	2	OTG	2	1					0/0	3(16)	2	LQFP64
	GD32F403RKT6	168	3072K	128K	up to 51	8	2		2	2	1	3+2	2	3	2	OTG	2	1					0/0	3(16)	2	LQFP64
	GD32F403VCT6	168	256K	64K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	LQFP100
	GD32F403VET6	168	512K	96K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	LQFP100
	GD32F403VGT6	168	1024K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	LQFP100
	GD32F403VIT6	168	2048K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	LQFP100
	GD32F403VKT6	168	3072K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	LQFP100
	GD32F403VCH6	168	256K	64K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	BGA100
	GD32F403VEH6	168	512K	96K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	BGA100
	GD32F403VGH6	168	1024K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	BGA100
	GD32F403VIH6	168	2048K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	BGA100
	GD32F403VKH6	168	3072K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	BGA100
	GD32F403ZCT6	168	256K	64K	up to 112	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(21)	2	LQFP144
	GD32F403ZET6	168	512K	96K	up to 112	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(21)	2	LQFP144
	GD32F403ZGT6	168	1024K	128K	up to 112	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(21)	2	LQFP144
	GD32F403ZIT6	168	2048K	128K	up to 112	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(21)	2	LQFP144
	GD32F403ZKT6	168	3072K	128K	up to 112	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(21)	2	LQFP144
GD32F405	GD32F405RET6	168	512K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP64
	GD32F405RGT6	168	1024K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP64
	GD32F405RKT6	168	3072K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP64
	GD32F405VGT6	168	1024K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP100
	GD32F405VKT6	168	3072K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP100
	GD32F405VGH6	168	1024K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	BGA100
	GD32F405VKH6	168	3072K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	BGA100
	GD32F405ZGT6	168	1024K	192K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(24)	2	LQFP144
	GD32F405ZKT6	168	3072K	192K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(24)	2	LQFP144

High-Performance MCU

GD32F4 Series 32-bit Arm® Cortex®-M4 High-Performance MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity											EXMC/SDRAM	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Basic TM (16bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB OTG	I²S	SDIO	LCD- SDIO TFT	Camera	ETH MAC	IPA		12bit ADC Units (CHs)	12bit DAC Units	
GD32F407	GD32F407RET6	168	512K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F407RGT6	168	1024K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F407RKT6	168	3072K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F407VET6	168	512K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F407VGT6	168	1024K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F407VKT6	168	3072K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F407VEH6	168	512K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F407VGH6	168	1024K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F407VKH6	168	3072K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F407ZET6	168	512K	192K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F407ZGT6	168	1024K	192K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F407ZKT6	168	3072K	192K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F407IEH6	168	512K	192K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
	GD32F407IGH6	168	1024K	192K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
GD32F450	GD32F407IKH6	168	3072K	192K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
	GD32F450VET6	200	512K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F450VGT6	200	1024K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F450VIT6	200	2048K	512K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F450VKT6	200	3072K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F450ZET6	200	512K	256K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F450ZGT6	200	1024K	256K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F450ZIT6	200	2048K	512K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F450ZKT6	200	3072K	256K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F450IGH6	200	1024K	256K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176
	GD32F450IIH6	200	2048K	512K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176
	GD32F450IKH6	200	3072K	256K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176

High-Performance MCU

GD32E51x Series 32-bit Arm® Cortex®-M33 High-Performance MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity												EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB 2.0	I²S	SDIO	Ethernet	TMU	HRTIM	COMP	12bit ADC Units (CHs)		12bit DAC Units		
GD32E513	GD32E513CC06	180	256K	96K	up to 37	1	6	1	2	1	2	1	3+0	3	3	2	FS	2			•	•	3		3(10)	3	QFN48	
	GD32E513CCT6	180	256K	96K	up to 37	1	6	1	2	1	2	1	3+0	3	3	2	FS	2			•	•	3		3(10)	3	LQFP48	
	GD32E513CET6	180	512K	128K	up to 37	1	12	1	2	1	2	1	3+0	3	3	2	FS	2			•	•	3		3(10)	3	LQFP48	
	GD32E513RCT6	180	256K	96K	up to 51	1	6	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3		3(16)	3	LQFP64	
	GD32E513RET6	180	512K	128K	up to 51	1	12	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3		3(16)	3	LQFP64	
	GD32E513VCT6	180	256K	96K	up to 80	1	6	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3	•	3(16)	3	LQFP100	
	GD32E513VET6	180	512K	128K	up to 80	1	12	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3	•	3(16)	3	LQFP100	
	GD32E513ZCT6	180	256K	96K	up to 112	1	6	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3	•	3(21)	3	LQFP144	
	GD32E513ZET6	180	512K	128K	up to 112	1	12	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3	•	3(21)	3	LQFP144	
GD32E517	GD32E517RCT6	180	256K	96K	up to 51	1	6	1	2	1	2	1	4+2	3	3	3	HS OTG	2	1		•	•	•	3		3(16)	3	LQFP64
	GD32E517RET6	180	512K	128K	up to 51	1	12	2	2	1	2	1	4+2	3	3	3	HS OTG	2	1		•	•	•	3		3(16)	3	LQFP64
	GD32E517VCT6	180	256K	96K	up to 80	1	6	1	2	1	2	1	4+2	3	3	3	HS OTG	2	1		•	•	•	3	•	3(16)	3	LQFP100
	GD32E517VET6	180	512K	128K	up to 80	1	12	2	2	1	2	1	4+2	3	3	3	HS OTG	2	1		•	•	•	3	•	3(16)	3	LQFP100
	GD32E517ZCT6	180	256K	96K	up to 112	1	6	2	2	1	2	1	4+2	3	3	3	HS OTG	2	1		•	•	•	3	•	3(21)	3	LQFP144
	GD32E517ZET6	180	512K	128K	up to 112	1	12	2	2	1	2	1	4+2	3	3	3	HS OTG	2	1		•	•	•	3	•	3(21)	3	LQFP144
GD32E518	GD32E518CET6	180	512K	128K	up to 37	1	12	2	2	1	2	1	3+0	3	3	3xFD	HS OTG	2				•	•	3		3(10)	3	LQFP48
	GD32E518RET6	180	512K	128K	up to 51	1	12	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2	1		•	•	•	3		3(16)	3	LQFP64
	GD32E518VET6	180	512K	128K	up to 80	1	12	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2	1		•	•	•	3	•	3(16)	3	LQFP100
	GD32E518ZET6	180	512K	128K	up to 112	1	12	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2	1		•	•	•	3	•	3(21)	3	LQFP144

High-Performance MCU

GD32E5 Series 32-bit Arm® Cortex®-M33 High-Performance MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity											EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB 2.0	I²S	SDIO	Ethernet	TMU	HRTIM	COMP		12bit ADC Units (CHs)	12bit DAC Units	
GD32E503	GD32E503CCT6	180	256K	96K	up to 37	1	3	1	2	1	2	1	3+0	3	3	2	FS	2				•			3(10)	2	LQFP48
	GD32E503CET6	180	512K	128K	up to 37	1	9	1	2	1	2	1	3+0	3	3	2	FS	2				•			3(10)	2	LQFP48
	GD32E503RCT6	180	256K	96K	up to 51	1	3	2	2	1	2	1	4+2	3	3	2	FS	2	1				•		3(16)	2	LQFP64
	GD32E503RET6	180	512K	128K	up to 51	1	9	2	2	1	2	1	4+2	3	3	2	FS	2	1				•		3(16)	2	LQFP64
	GD32E503VCT6	180	256K	96K	up to 80	1	3	2	2	1	2	1	4+2	3	3	2	FS	2	1				•	•	3(16)	2	LQFP100
	GD32E503VET6	180	512K	128K	up to 80	1	9	2	2	1	2	1	4+2	3	3	2	FS	2	1				•	•	3(16)	2	LQFP100
	GD32E503ZCT6	180	256K	96K	up to 112	1	3	2	2	1	2	1	4+2	3	3	2	FS	2	1				•	•	3(21)	2	LQFP144
	GD32E503ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	4+2	3	3	2	FS	2	1				•	•	3(21)	2	LQFP144
GD32E505	GD32E505RBT6	180	128K	80K	up to 51	1	3	1	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3		2(16)	2	LQFP64
	GD32E505RCT6	180	256K	96K	up to 51	1	3	1	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3		2(16)	2	LQFP64
	GD32E505RET6	180	512K	128K	up to 51	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3		2(16)	2	LQFP64
	GD32E505VCT6	180	256K	96K	up to 80	1	3	1	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3	•	2(16)	2	LQFP100
	GD32E505VET6	180	512K	128K	up to 80	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3	•	2(16)	2	LQFP100
	GD32E505ZCT6	180	256K	96K	up to 112	1	3	2	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3	•	2(16)	2	LQFP144
	GD32E505ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3	•	2(16)	2	LQFP144
GD32E507	GD32E507RCT6	180	256K	96K	up to 51	1	3	1	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3		2(16)	2	LQFP64
	GD32E507RET6	180	512K	128K	up to 51	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3		2(16)	2	LQFP64
	GD32E507VCT6	180	256K	96K	up to 80	1	3	1	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP100
	GD32E507VET6	180	512K	128K	up to 80	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP100
	GD32E507ZCT6	180	256K	96K	up to 112	1	3	2	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP144
	GD32E507ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP144
GD32E508	GD32E508RET6	180	512K	128K	up to 51	1	9	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2		•	•	•	3		2(16)	2	LQFP64
	GD32E508VET6	180	512K	128K	up to 80	1	9	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP100
	GD32E508ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP144

High-Performance MCU

GD32F2 Series 32-bit Arm® Cortex®-M3 High-Performance MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity												EXMC/SDRAM	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	LCD- TFT	Camera	ETH MAC	Crypto/ Hash	12bit ADC Units (CHs)		12bit DAC Units		
GD32F205	GD32F205RCT6	120	256K	128K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1							3(16)	2	LQFP64
	GD32F205RET6	120	512K	128K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1							3(16)	2	LQFP64
	GD32F205RGT6	120	1024K	256K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1							3(16)	2	LQFP64
	GD32F205RKT6	120	3072K	256K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1							3(16)	2	LQFP64
	GD32F205VCT6	120	256K	128K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/0	3(16)	2	LQFP100	
	GD32F205VET6	120	512K	128K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/0	3(16)	2	LQFP100	
	GD32F205VGT6	120	1024K	256K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/0	3(16)	2	LQFP100	
	GD32F205VKT6	120	3072K	256K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/0	3(16)	2	LQFP100	
	GD32F205ZCT6	120	256K	128K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/1	3(24)	2	LQFP144	
	GD32F205ZET6	120	512K	128K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/1	3(24)	2	LQFP144	
	GD32F205ZGT6	120	1024K	256K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/1	3(24)	2	LQFP144	
	GD32F205ZKT6	120	3072K	256K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/1	3(24)	2	LQFP144	
GD32F207	GD32F207RCT6	120	256K	128K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1		1	1	1			3(16)	2	LQFP64
	GD32F207RET6	120	512K	128K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1		1	1	1			3(16)	2	LQFP64
	GD32F207RGT6	120	1024K	256K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1		1	1	1			3(16)	2	LQFP64
	GD32F207RKT6	120	3072K	256K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1		1	1	1			3(16)	2	LQFP64
	GD32F207VCT6	120	256K	128K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/0	3(16)	2	LQFP100	
	GD32F207VET6	120	512K	128K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/0	3(16)	2	LQFP100	
	GD32F207VGT6	120	1024K	256K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/0	3(16)	2	LQFP100	
	GD32F207VKT6	120	3072K	256K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/0	3(16)	2	LQFP100	
	GD32F207ZCT6	120	256K	128K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP144	
	GD32F207ZET6	120	512K	128K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP144	
	GD32F207ZGT6	120	1024K	256K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP144	
	GD32F207ZKT6	120	3072K	256K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP144	
	GD32F207IET6	120	512K	128K	up to 140	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP176	
	GD32F207IGT6	120	1024K	256K	up to 140	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP176	
	GD32F207IKT6	120	3072K	256K	up to 140	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP176	

Main-Stream MCU

GD32F30x Series 32-bit Arm® Cortex®-M4 Main-Stream MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ethernet		12bit ADC Units (CHs)	12bit DAC Units	
GD32F303	GD32F303CBT6	120	128K	32K	up to 37	4	1	2	1	2	1	3	2	3	1	1	2				3(10)	2	LQFP48
	GD32F303CCT6	120	256K	48K	up to 37	4	1	2	1	2	1	3	2	3	1	1	2				3(10)	2	LQFP48
	GD32F303CET6	120	512K	64K	up to 37	4	1	2	1	2	1	3	2	3	1	1	2				3(10)	2	LQFP48
	GD32F303CGT6	120	1024K	96K	up to 37	10	1	2	1	2	1	3	2	3	1	1	2				3(10)	2	LQFP48
	GD32F303RBT6	120	128K	32K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2				3(16)	2	LQFP64
	GD32F303RCT6	120	256K	48K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F303RET6	120	512K	64K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F303RGT6	120	1024K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F303RIT6	120	2048K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F303RKT6	120	3072K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F303VBT6	120	128K	32K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2			•	3(16)	2	LQFP100
	GD32F303VCT6	120	256K	48K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F303VET6	120	512K	64K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F303VGT6	120	1024K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F303VIT6	120	2048K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F303VKT6	120	3072K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F303ZCT6	120	256K	48K	up to 112	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F303ZET6	120	512K	64K	up to 112	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F303ZGT6	120	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
GD32F305	GD32F303ZIT6	120	2048K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F303ZKT6	120	3072K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F305RBT6	120	128K	64K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F305RCT6	120	256K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F305RET6	120	512K	96K	up to 51	4	2	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F305RGT6	120	1024K	96K	up to 51	10	2	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F305VCT6	120	256K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F305VET6	120	512K	96K	up to 80	4	2	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F305VGT6	120	1024K	96K	up to 80	10	2	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F305ZCT6	120	256K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
GD32F307	GD32F305ZET6	120	512K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
	GD32F305ZGT6	120	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
	GD32F307RCT6	120	256K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F307RET6	120	512K	96K	up to 51	4	2	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F307RGT6	120	1024K	96K	up to 51	10	2	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F307VCT6	120	256K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F307VET6	120	512K	96K	up to 80	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F307VGT6	120	1024K	96K	up to 80	10	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F307ZCT6	120	256K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144
	GD32F307ZET6	120	512K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144
	GD32F307ZGT6	120	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144

Main-Stream MCU

GD32F10x Series 32-bit Arm® Cortex®-M3 Main-Stream MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ethernet		12bit ADC Units (CHs)	12bit DAC Units	
GD32F101	GD32F101T4U6	56	16K	4K	up to 26	2			1	2	1	2	1	1							1(10)		QFN36
	GD32F101T6U6	56	32K	6K	up to 26	2			1	2	1	2	1	1							1(10)		QFN36
	GD32F101T8U6	56	64K	10K	up to 26	3			1	2	1	2	1	1							1(10)		QFN36
	GD32F101TBU6	56	128K	16K	up to 26	3			1	2	1	2	1	1							1(10)		QFN36
	GD32F101C4T6	56	16K	4K	up to 37	2			1	2	1	2	1	1							1(10)		LQFP48
	GD32F101C6T6	56	32K	6K	up to 37	2			1	2	1	2	1	1							1(10)		LQFP48
	GD32F101C8T6	56	64K	10K	up to 37	3			1	2	1	3	2	2							1(10)		LQFP48
	GD32F101CBT6	56	128K	16K	up to 37	3			1	2	1	3	2	2							1(10)		LQFP48
	GD32F101R4T6	56	16K	4K	up to 51	2			1	2	1	2	1	1							1(16)		LQFP64
	GD32F101R6T6	56	32K	6K	up to 51	2			1	2	1	2	1	1							1(16)		LQFP64
	GD32F101R8T6	56	64K	10K	up to 51	3			1	2	1	3	2	2							1(16)		LQFP64
	GD32F101RBT6	56	128K	16K	up to 51	3			1	2	1	3	2	2							1(16)		LQFP64
	GD32F101RCT6	56	256K	32K	up to 51	4		2	1	2	1	5	2	3							1(16)		LQFP64
	GD32F101RDT6	56	384K	48K	up to 51	4		2	1	2	1	5	2	3							1(16)		LQFP64
	GD32F101RET6	56	512K	48K	up to 51	4		2	1	2	1	5	2	3							1(16)		LQFP64
	GD32F101RFT6	56	768K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)		LQFP64
	GD32F101RGT6	56	1024K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)		LQFP64
	GD32F101RIT6	56	2048K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)		LQFP64
	GD32F101RKT6	56	3072K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)		LQFP64
	GD32F101V8T6	56	64K	10K	up to 80	3			1	2	1	3	2	2						•	1(16)		LQFP100
	GD32F101VBT6	56	128K	16K	up to 80	3			1	2	1	3	2	2						•	1(16)		LQFP100
	GD32F101VCT6	56	256K	32K	up to 80	4		2	1	2	1	5	2	3						•	1(16)		LQFP100
	GD32F101VDT6	56	384K	48K	up to 80	4		2	1	2	1	5	2	3						•	1(16)		LQFP100
	GD32F101VET6	56	512K	48K	up to 80	4		2	1	2	1	5	2	3						•	1(16)		LQFP100
	GD32F101VFT6	56	768K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)		LQFP100
	GD32F101VGT6	56	1024K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)		LQFP100
	GD32F101VIT6	56	2048K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)		LQFP100
	GD32F101VKT6	56	3072K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)		LQFP100
	GD32F101ZCT6	56	256K	32K	up to 112	4		2	1	2	1	5	2	3						•	1(16)		LQFP144
	GD32F101ZDT6	56	384K	48K	up to 112	4		2	1	2	1	5	2	3						•	1(16)		LQFP144
	GD32F101ZET6	56	512K	48K	up to 112	4		2	1	2	1	5	2	3						•	1(16)		LQFP144
	GD32F101ZFT6	56	768K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)		LQFP144
	GD32F101ZGT6	56	1024K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)		LQFP144
	GD32F101ZIT6	56	2048K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)		LQFP144
	GD32F101ZKT6	56	3072K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)		LQFP144

Main-Stream MCU

GD32F10x Series 32-bit Arm® Cortex®-M3 Main-Stream MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ethernet		12bit ADC Units (CHs)	12bit DAC Units	
GD32F103	GD32F103T4U6	108	16K	6K	up to 26	2	1		1	2	1	2	1	1	1	1					2(10)		QFN36
	GD32F103T6U6	108	32K	10K	up to 26	2	1		1	2	1	2	1	1	1	1					2(10)		QFN36
	GD32F103T8U6	108	64K	20K	up to 26	3	1		1	2	1	2	1	1	1	1					2(10)		QFN36
	GD32F103TBU6	108	128K	20K	up to 26	3	1		1	2	1	2	1	1	1	1					2(10)		QFN36
	GD32F103C4T6	108	16K	6K	up to 37	2	1		1	2	1	2	1	1	1	1					2(10)		LQFP48
	GD32F103C6T6	108	32K	10K	up to 37	2	1		1	2	1	2	1	1	1	1					2(10)		LQFP48
	GD32F103C8T6	108	64K	20K	up to 37	3	1		1	2	1	3	2	2	1	1					2(10)		LQFP48
	GD32F103CBT6	108	128K	20K	up to 37	3	1		1	2	1	3	2	2	1	1					2(10)		LQFP48
	GD32F103R4T6	108	16K	6K	up to 51	2	1		1	2	1	2	1	1	1	1					2(16)		LQFP64
	GD32F103R6T6	108	32K	10K	up to 51	2	1		1	2	1	2	1	1	1	1					2(16)		LQFP64
	GD32F103R8T6	108	64K	20K	up to 51	3	1		1	2	1	3	2	2	1	1					2(16)		LQFP64
	GD32F103RBT6	108	128K	20K	up to 51	3	1		1	2	1	3	2	2	1	1					2(16)		LQFP64
	GD32F103RCT6	108	256K	48K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RDT6	108	384K	64K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RET6	108	512K	64K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RFT6	108	768K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RGT6	108	1024K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RIT6	108	2048K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RKT6	108	3072K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103V8T6	108	64K	20K	up to 80	3	1		1	2	1	3	2	2	1	1				•	2(16)		LQFP100
	GD32F103VBT6	108	128K	20K	up to 80	3	1		1	2	1	3	2	2	1	1				•	2(16)		LQFP100
	GD32F103VCT6	108	256K	48K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VDT6	108	384K	64K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VET6	108	512K	64K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VFT6	108	768K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VGT6	108	1024K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VIT6	108	2048K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VKT6	108	3072K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103ZCT6	108	256K	48K	up to 112	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZDT6	108	384K	64K	up to 112	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZET6	108	512K	64K	up to 112	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZFT6	108	768K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZGT6	108	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZIT6	108	2048K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZKT6	108	3072K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144

Main-Stream MCU

GD32F10x Series 32-bit Arm® Cortex®-M3 Main-Stream MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ethernet		12bit ADC Units (CHs)	12bit DAC Units	
GD32F105	GD32F105R8T6	108	64K	64K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RBT6	108	128K	64K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RCT6	108	256K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RDT6	108	384K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RET6	108	512K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RFT6	108	768K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RGT6	108	1024K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105V8T6	108	64K	64K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP100
	GD32F105VBT6	108	128K	64K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP100
	GD32F105VCT6	108	256K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP100
	GD32F105VDT6	108	384K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP100
	GD32F105VET6	108	512K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP100
	GD32F105VFT6	108	768K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP100
	GD32F105VGT6	108	1024K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP100
	GD32F105ZCT6	108	256K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP144
	GD32F105ZDT6	108	384K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP144
	GD32F105ZET6	108	512K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP144
	GD32F105ZFT6	108	768K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP144
GD32F105ZGT6	108	1024K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP144	
GD32F107	GD32F107RBT6	108	128K	96K	up to 51	4	1	2	1	2	1	5	1	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F107RCT6	108	256K	96K	up to 51	4	1	2	1	2	1	5	1	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F107RDT6	108	384K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F107RET6	108	512K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F107RFT6	108	768K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F107RGT6	108	1024K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F107VBT6	108	128K	96K	up to 80	4	1	2	1	2	1	5	1	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F107VCT6	108	256K	96K	up to 80	4	1	2	1	2	1	5	1	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F107VDT6	108	384K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F107VET6	108	512K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F107VFT6	108	768K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F107VGT6	108	1024K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F107ZCT6	108	256K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144
	GD32F107ZDT6	108	384K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144
	GD32F107ZET6	108	512K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144
	GD32F107ZFT6	108	768K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144
	GD32F107ZGT6	108	1024K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144

Main-Stream MCU

GD32E1/C1 Series 32-bit Arm® Cortex®-M4 Main-Stream MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ethernet		12bit ADC Units (CHs)	12bit DAC Units	
GD32E103	GD32E103T8U6	120	64K	20K	up to 26	4	1	2	1	2	1	2+0	1	1		OTG					2(10)	2	QFN36
	GD32E103TBU6	120	128K	32K	up to 26	4	1	2	1	2	1	2+0	1	1		OTG					2(10)	2	QFN36
	GD32E103C8T6	120	64K	20K	up to 37	10	1	2	1	2	1	3+0	2	3		OTG	2				2(10)	2	LQFP48
	GD32E103CBT6	120	128K	32K	up to 37	10	1	2	1	2	1	3+0	2	3		OTG	2				2(10)	2	LQFP48
	GD32E103R8T6	120	64K	20K	up to 51	10	2	2	1	2	1	3+2	2	3		OTG	2				2(16)	2	LQFP64
	GD32E103RBT6	120	128K	32K	up to 51	10	2	2	1	2	1	3+2	2	3		OTG	2				2(16)	2	LQFP64
	GD32E103V8T6	120	64K	20K	up to 80	10	2	2	1	2	1	3+2	2	3		OTG	2			•	2(16)	2	LQFP100
	GD32E103VBT6	120	128K	32K	up to 80	10	2	2	1	2	1	3+2	2	3		OTG	2			•	2(16)	2	LQFP100
GD32C103	GD32C103TBU6	120	128K	32K	up to 26	4	1	2	1	2	1	2+0	1	1	2 x FD	OTG					2(10)	2	QFN36
	GD32C103CBT6	120	128K	32K	up to 37	10	1	2	1	2	1	3+0	2	3	2 x FD	OTG	2				2(10)	2	LQFP48
	GD32C103RBT6	120	128K	32K	up to 51	10	2	2	1	2	1	3+2	2	3	2 x FD	OTG	2				2(16)	2	LQFP64
	GD32C103VBT6	120	128K	32K	up to 80	10	2	2	1	2	1	3+2	2	3	2 x FD	OTG	2			•	2(16)	2	LQFP100
GD32E113	GD32E113T8U6	120	64K	20K	up to 26	4	1	2	1	2	1	2+0	1	1		OTG					2(10)	2	QFN36
	GD32E113TBU6	120	128K	32K	up to 26	4	1	2	1	2	1	2+0	1	1		OTG					2(10)	2	QFN36
	GD32E113C8T6	120	64K	20K	up to 37	10	1	2	1	2	1	3+0	2	3		OTG	2				2(10)	2	LQFP48
	GD32E113CBT6	120	128K	32K	up to 37	10	1	2	1	2	1	3+0	2	3		OTG	2				2(10)	2	LQFP48
	GD32E113R8T6	120	64K	20K	up to 51	10	2	2	1	2	1	3+2	2	3		OTG	2				2(16)	2	LQFP64
	GD32E113RBT6	120	128K	32K	up to 51	10	2	2	1	2	1	3+2	2	3		OTG	2				2(16)	2	LQFP64
	GD32E113V8T6	120	64K	20K	up to 80	10	2	2	1	2	1	3+2	2	3		OTG	2			•	2(16)	2	LQFP100
	GD32E113VBT6	120	128K	32K	up to 80	10	2	2	1	2	1	3+2	2	3		OTG	2			•	2(16)	2	LQFP100
GD32C113	GD32C113TBU6	120	128K	32K	up to 26	4	1	2	1	2	1	2+0	1	1	2 x FD	OTG					2(10)	2	QFN36
	GD32C113CBT6	120	128K	32K	up to 37	10	1	2	1	2	1	3+0	2	3	2 x FD	OTG	2				2(10)	2	LQFP48
	GD32C113RBT6	120	128K	32K	up to 51	10	2	2	1	2	1	3+2	2	3	2 x FD	OTG	2				2(16)	2	LQFP64
	GD32C113VBT6	120	128K	32K	up to 80	10	2	2	1	2	1	3+2	2	3	2 x FD	OTG	2			•	2(16)	2	LQFP100

Main-Stream MCU

GD32E502 Series 32-bit Arm® Cortex®-M33 Main-Stream MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)			I/O	Timer						Connectivity								Analog Interface		Package
			Flash	SRAM	Data-Flash /EEPROM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART /LIN	I²C	SPI	CAN 2.0B	I²S	COMP	MFCOM	12bit ADC Units (CHs)	12bit DAC Units		
GD32E502	GD32E502KBU3	100	128K	24K	32K/2K	up to 27	1	3	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32	
	GD32E502KCU3	100	256K	32K	64K/4K	up to 27	1	4	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32	
	GD32E502CBT3	100	128K	24K	32K/2K	up to 42	1	3	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48	
	GD32E502CCT3	100	256K	32K	64K/4K	up to 42	1	4	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48	
	GD32E502RBT3	100	128K	24K	32K/2K	up to 57	1	3	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64	
	GD32E502RCT3	100	256K	32K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64	
	GD32E502RDT3	100	384K	48K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64	
	GD32E502VBT3	100	128K	24K	32K/2K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100	
	GD32E502VCT3	100	256K	32K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100	
	GD32E502VDT3	100	384K	48K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100	
	GD32E502KBU7	100	128K	24K	32K/2K	up to 27	1	3	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32	
	GD32E502KCU7	100	256K	32K	64K/4K	up to 27	1	4	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32	
	GD32E502CBT7	100	128K	24K	32K/2K	up to 42	1	3	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48	
	GD32E502CCT7	100	256K	32K	64K/4K	up to 42	1	4	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48	
	GD32E502RBT7	100	128K	24K	32K/2K	up to 57	1	3	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64	
	GD32E502RCT7	100	256K	32K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64	
	GD32E502RDT7	100	384K	48K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64	
	GD32E502VBT7	100	128K	24K	32K/2K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100	
	GD32E502VCT7	100	256K	32K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100	
	GD32E502VDT7	100	384K	48K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100	

GD32VF103 Series 32-bit RISC-V Main-Stream MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ethernet		12bit ADC Units (CHs)	12bit DAC Units	
GD32VF103	GD32VF103T4U6	108	16K	6K	up to 26	2	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	QFN36
	GD32VF103T6U6	108	32K	10K	up to 26	2	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	QFN36
	GD32VF103T8U6	108	64K	20K	up to 26	4	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	QFN36
	GD32VF103TBU6	108	128K	32K	up to 26	4	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	QFN36
	GD32VF103C4T6	108	16K	6K	up to 37	2	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	LQFP48
	GD32VF103C6T6	108	32K	10K	up to 37	2	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	LQFP48
	GD32VF103C8T6	108	64K	20K	up to 37	4	1	2	1	2	1	3+0	2	3	2	OTG	2				2(10)	2	LQFP48
	GD32VF103CBT6	108	128K	32K	up to 37	4	1	2	1	2	1	3+0	2	3	2	OTG	2				2(10)	2	LQFP48
	GD32VF103R4T6	108	16K	6K	up to 51	2	1	2	1	2	1	2+0	1	1	2	OTG					2(16)	2	LQFP64
	GD32VF103R6T6	108	32K	10K	up to 51	2	1	2	1	2	1	2+0	1	1	2	OTG					2(16)	2	LQFP64
	GD32VF103R8T6	108	64K	20K	up to 51	4	1	2	1	2	1	3+2	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32VF103RBT6	108	128K	32K	up to 51	4	1	2	1	2	1	3+2	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32VF103V8T6	108	64K	20K	up to 80	4	1	2	1	2	1	3+2	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32VF103VBT6	108	128K	32K	up to 80	4	1	2	1	2	1	3+2	2	3	2	OTG	2			•	2(16)	2	LQFP100

Entry-Level MCU

GD32E23x Series 32-bit Arm® Cortex®-M23 Entry-Level MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity							Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART	I ² C	SPI	USB 2.0 FS	I ² S	Comp	OP-AMP	12bit ADC Units (CHs)	12bit DAC Units	
GD32E235	GD32E235F4P6TR	72	16K	4K	up to 15		4	1	1	1	2	1	1	1	1		1	1		1(9)		TSSOP20
	GD32E235F6P6TR	72	32K	6K	up to 15		4	1	1	1	2	1	2	1	1		1	1		1(9)		TSSOP20
	GD32E235F8P6TR	72	64K	8K	up to 15		4	1	1	1	2	1	2	2	2		1	1		1(9)		TSSOP20
	GD32E235F4V6TR	72	16K	4K	up to 15		4	1	1	1	2	1	1	1	1		1	1		1(9)		LGA20
	GD32E235F6V6TR	72	32K	6K	up to 15		4	1	1	1	2	1	2	1	1		1	1		1(9)		LGA20
	GD32E235F8V6TR	72	64K	8K	up to 15		4	1	1	1	2	1	2	2	2		1	1		1(9)		LGA20
	GD32E235E8P6TR	72	64K	8K	up to 19		4	1	1	1	2	1	2	2	2		1	1		1(10)		TSSOP24
	GD32E235G4U6TR	72	16K	4K	up to 23		4	1	1	1	2	1	1	1	1		1	1		1(10)		QFN28
	GD32E235G6U6TR	72	32K	6K	up to 23		4	1	1	1	2	1	2	1	1		1	1		1(10)		QFN28
	GD32E235G8U6TR	72	64K	8K	up to 23		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN28
	GD32E235GBU7TR	72	128K	16K	up to 23		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN28
	GD32E235K4U6	72	16K	4K	up to 27		4	1	1	1	2	1	1	1	1		1	1		1(10)		QFN32
	GD32E235K6U6	72	32K	6K	up to 27		4	1	1	1	2	1	2	1	1		1	1		1(10)		QFN32
	GD32E235K8U6	72	64K	8K	up to 27		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN32
	GD32E235K8U7	72	64K	8K	up to 27		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN32
	GD32E235KBU6	72	128K	16K	up to 27		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN32
	GD32E235K4T6	72	16K	4K	up to 25		4	1	1	1	2	1	1	1	1		1	1		1(10)		LQFP32
	GD32E235K6T6	72	32K	6K	up to 25		4	1	1	1	2	1	2	1	1		1	1		1(10)		LQFP32
	GD32E235K8T6	72	64K	8K	up to 25		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP32
	GD32E235KBT6	72	128K	16K	up to 25		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP32
	GD32E235CBO6	72	128K	16K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN48
	GD32E235C4T6	72	16K	4K	up to 39		4	1	1	1	2	1	1	1	1		1	1		1(10)		LQFP48
	GD32E235C6T6	72	32K	6K	up to 39		4	1	1	1	2	1	2	1	1		1	1		1(10)		LQFP48
	GD32E235C8T6	72	64K	8K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP48
	GD32E235C8T7	72	64K	8K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP48
	GD32E235CBT6	72	128K	16K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP48
	GD32E235CBT7	72	128K	16K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP48
GD32E230	GD32E230F4P6TR	72	16K	4K	up to 15		4	1	1	1	2	1	1	1	1		1	1		1(9)		TSSOP20
	GD32E230F6P6TR	72	32K	6K	up to 15		4	1	1	1	2	1	2	1	1		1	1		1(9)		TSSOP20
	GD32E230F8P6TR	72	64K	8K	up to 15		4	1	1	1	2	1	2	2	2		1	1		1(9)		TSSOP20
	GD32E230F4V6TR	72	16K	4K	up to 15		4	1	1	1	2	1	1	1	1		1	1		1(9)		LGA20
	GD32E230F6V6TR	72	32K	6K	up to 15		4	1	1	1	2	1	2	1	1		1	1		1(9)		LGA20
	GD32E230F8V6TR	72	64K	8K	up to 15		4	1	1	1	2	1	2	2	2		1	1		1(9)		LGA20
	GD32E230E8P6TR	72	64K	8K	up to 19		4	1	1	1	2	1	2	2	2		1	1		1(10)		TSSOP24
	GD32E230G4U6TR	72	16K	4K	up to 23		4	1	1	1	2	1	1	1	1		1	1		1(10)		QFN28
	GD32E230G6U6TR	72	32K	6K	up to 23		4	1	1	1	2	1	2	1	1		1	1		1(10)		QFN28
	GD32E230G8U6TR	72	64K	8K	up to 23		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN28
	GD32E230K4U6	72	16K	4K	up to 27		4	1	1	1	2	1	1	1	1		1	1		1(10)		QFN32
	GD32E230K6U6	72	32K	6K	up to 27		4	1	1	1	2	1	2	1	1		1	1		1(10)		QFN32
	GD32E230K8U6	72	64K	8K	up to 27		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN32
	GD32E230K4T6	72	16K	4K	up to 25		4	1	1	1	2	1	1	1	1		1	1		1(10)		LQFP32
	GD32E230K6T6	72	32K	6K	up to 25		4	1	1	1	2	1	2	1	1		1	1		1(10)		LQFP32
	GD32E230K8T6	72	64K	8K	up to 25		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP32
	GD32E230C4T6	72	16K	4K	up to 39		4	1	1	1	2	1	1	1	1		1	1		1(10)		LQFP48
	GD32E230C6T6	72	32K	6K	up to 39		4	1	1	1	2	1	2	1	1		1	1		1(10)		LQFP48
	GD32E230C8T6	72	64K	8K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP48

Entry-Level MCU

GD32F3x0 Series 32-bit Arm® Cortex®-M4 Entry-Level MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity								Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART	I²C	SPI	USB 2.0 FS	I²S	CEC	Comp	12bit ADC Units (CHs)	12bit DAC Units		
GD32F310	GD32F310F4P6TR	72	16K	4K	up to 15		4	1		1	2	1	1	1	1		1			1(9)		TSSOP20	
	GD32F310F6P6TR	72	32K	6K	up to 15		4	1		1	2	1	2	1	1		1			1(9)		TSSOP20	
	GD32F310F8P6TR	72	64K	8K	up to 15		4	1		1	2	1	2	2	2		1			1(9)		TSSOP20	
	GD32F310G8U6TR	72	64K	8K	up to 23		5	1		1	2	1	2	2	2		1			1(10)		QFN28	
	GD32F310K8U6	72	64K	8K	up to 27		5	1		1	2	1	2	2	2		1			1(10)		QFN32	
	GD32F310K6T6	72	32K	6K	up to 25		4	1		1	2	1	2	1	1		1			1(10)		LQFP32	
	GD32F310K8T6	72	64K	8K	up to 25		5	1		1	2	1	2	2	2		1			1(10)		LQFP32	
	GD32F310C8T6	72	64K	8K	up to 39		5	1		1	2	1	2	2	2		1			1(10)		LQFP48	
	GD32F310CBT6	72	128K	16K	up to 39		5	1		1	2	1	2	2	2		1			1(10)		LQFP48	
GD32F330	GD32F330F4P6TR	84	16K	4K	up to 15	1	4	1		1	2	1	1	1	1					1(9)		TSSOP20	
	GD32F330F6P6TR	84	32K	4K	up to 15	1	4	1		1	2	1	2	1	1					1(9)		TSSOP20	
	GD32F330F8P6TR	84	64K	8K	up to 15	1	4	1		1	2	1	2	2	2					1(9)		TSSOP20	
	GD32F330G4U6TR	84	16K	4K	up to 23	1	4	1		1	2	1	1	1	1					1(10)		QFN28	
	GD32F330G6U6TR	84	32K	4K	up to 23	1	4	1		1	2	1	2	1	1					1(10)		QFN28	
	GD32F330G8U6TR	84	64K	8K	up to 23	1	5	1		1	2	1	2	2	2					1(10)		QFN28	
	GD32F330K4U6	84	16K	4K	up to 27	1	4	1		1	2	1	1	1	1					1(10)		QFN32	
	GD32F330K6U6	84	32K	4K	up to 27	1	4	1		1	2	1	2	1	1					1(10)		QFN32	
	GD32F330K8U6	84	64K	8K	up to 27	1	5	1		1	2	1	2	2	2					1(10)		QFN32	
	GD32F330K4T6	84	16K	4K	up to 25	1	4	1		1	2	1	1	1	1					1(10)		LQFP32	
	GD32F330K6T6	84	32K	4K	up to 25	1	4	1		1	2	1	2	1	1					1(10)		LQFP32	
	GD32F330K8T6	84	64K	8K	up to 25	1	5	1		1	2	1	2	2	2					1(10)		LQFP32	
	GD32F330C4T6	84	16K	4K	up to 39	1	4	1		1	2	1	1	1	1					1(10)		LQFP48	
	GD32F330C6T6	84	32K	4K	up to 39	1	4	1		1	2	1	2	1	1					1(10)		LQFP48	
	GD32F330C8T6	84	64K	8K	up to 39	1	5	1		1	2	1	2	2	2					1(10)		LQFP48	
	GD32F330CBT6	84	128K	16K	up to 39	1	5	1		1	2	1	2	2	2					1(10)		LQFP48	
	GD32F330R8T6	84	64K	16K	up to 55	1	5	1		1	2	1	2	2	2					1(16)		LQFP64	
	GD32F330RBT6	84	128K	16K	up to 55	1	5	1		1	2	1	2	2	2					1(16)		LQFP64	
GD32F350	GD32F350G4U6TR	108	16K	4K	up to 24	1	5	1	1	1	2	1	1	1	1	OTG	1	1	2	1(10)	1	QFN28	
	GD32F350G6U6TR	108	32K	6K	up to 24	1	5	1	1	1	2	1	2	1	1	OTG	1	1	2	1(10)	1	QFN28	
	GD32F350G8U6TR	108	64K	8K	up to 24	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(10)	1	QFN28	
	GD32F350K4U6	108	16K	4K	up to 27	1	5	1	1	1	2	1	1	1	1	OTG	1	1	2	1(10)	1	QFN32	
	GD32F350K6U6	108	32K	6K	up to 27	1	5	1	1	1	2	1	2	1	1	OTG	1	1	2	1(10)	1	QFN32	
	GD32F350K8U6	108	64K	8K	up to 27	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(10)	1	QFN32	
	GD32F350C4T6	108	16K	4K	up to 39	1	5	1	1	1	2	1	1	1	1	OTG	1	1	2	1(10)	1	LQFP48	
	GD32F350C6T6	108	32K	6K	up to 39	1	5	1	1	1	2	1	2	1	1	OTG	1	1	2	1(10)	1	LQFP48	
	GD32F350C8T6	108	64K	8K	up to 39	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(10)	1	LQFP48	
	GD32F350CBT6	108	128K	16K	up to 39	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(10)	1	LQFP48	
	GD32F350R4T6	108	16K	4K	up to 55	1	5	1	1	1	2	1	1	1	1	OTG	1	1	2	1(16)	1	LQFP64	
	GD32F350R6T6	108	32K	8K	up to 55	1	5	1	1	1	2	1	2	1	1	OTG	1	1	2	1(16)	1	LQFP64	
	GD32F350R8T6	108	64K	16K	up to 55	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(16)	1	LQFP64	
	GD32F350RBT6	108	128K	16K	up to 55	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(16)	1	LQFP64	

Entry-Level MCU

GD32F1x0 Series 32-bit Arm® Cortex®-M3 Entry-Level MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity							Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART	I²C	SPI	USB 2.0 FS	I²S	CEC	12bit ADC Units (CHs)	12bit DAC Units		
GD32F130	GD32F130F4P6TR	48	16K	4K	up to 15	1	4		1	1	2	1	1	1	1				1(9)		TSSOP20	
	GD32F130F6P6TR	48	32K	4K	up to 15	1	4		1	1	2	1	2	1	1				1(9)		TSSOP20	
	GD32F130F8P6TR	48	64K	8K	up to 15	1	4		1	1	2	1	2	2	2				1(9)		TSSOP20	
	GD32F130G4U6TR	48	16K	4K	up to 23	1	4		1	1	2	1	1	1	1				1(10)		QFN28	
	GD32F130G6U6TR	48	32K	4K	up to 23	1	4		1	1	2	1	2	1	1				1(10)		QFN28	
	GD32F130G8U6TR	48	64K	8K	up to 23	1	5		1	1	2	1	2	2	2				1(10)		QFN28	
	GD32F130K4T6	48	16K	4K	up to 27	1	4		1	1	2	1	1	1	1				1(10)		LQFP32	
	GD32F130K6T6	48	32K	4K	up to 27	1	4		1	1	2	1	2	1	1				1(10)		LQFP32	
	GD32F130K8T6	48	64K	8K	up to 27	1	5		1	1	2	1	2	2	2				1(10)		LQFP32	
	GD32F130K4U6	48	16K	4K	up to 27	1	4		1	1	2	1	1	1	1				1(10)		QFN32	
	GD32F130K6U6	48	32K	4K	up to 27	1	4		1	1	2	1	2	1	1				1(10)		QFN32	
	GD32F130K8U6	48	64K	8K	up to 27	1	5		1	1	2	1	2	2	2				1(10)		QFN32	
	GD32F130C4T6	48	16K	4K	up to 39	1	4		1	1	2	1	1	1	1				1(10)		LQFP48	
	GD32F130C6T6	48	32K	4K	up to 39	1	4		1	1	2	1	2	1	1				1(10)		LQFP48	
	GD32F130C8T6	48	64K	8K	up to 39	1	5		1	1	2	1	2	2	2				1(10)		LQFP48	
	GD32F130R8T6	48	64K	8K	up to 55	1	5		1	1	2	1	2	2	2				1(16)		LQFP64	
GD32F150	GD32F150G4U6TR	72	16K	4K	up to 24	1	5	1	1	1	2	1	1	1	1	1	1	1	1(10)	1	QFN28	
	GD32F150G6U6TR	72	32K	6K	up to 24	1	5	1	1	1	2	1	2	1	1	1	1	1	1(10)	1	QFN28	
	GD32F150G8U6TR	72	64K	8K	up to 24	1	5	1	1	1	2	1	2	2	2	1	1	1	1(10)	1	QFN28	
	GD32F150K4U6	72	16K	4K	up to 27	1	5	1	1	1	2	1	1	1	1	1	1	1	1(10)	1	QFN32	
	GD32F150K6U6	72	32K	6K	up to 27	1	5	1	1	1	2	1	2	1	1	1	1	1	1(10)	1	QFN32	
	GD32F150K8U6	72	64K	8K	up to 27	1	5	1	1	1	2	1	2	2	2	1	1	1	1(10)	1	QFN32	
	GD32F150C4T6	72	16K	4K	up to 39	1	5	1	1	1	2	1	1	1	1	1	1	1	1(10)	1	LQFP48	
	GD32F150C6T6	72	32K	6K	up to 39	1	5	1	1	1	2	1	2	1	1	1	1	1	1(10)	1	LQFP48	
	GD32F150C8T6	72	64K	8K	up to 39	1	5	1	1	1	2	1	2	2	2	1	1	1	1(10)	1	LQFP48	
	GD32F150R4T6	72	16K	4K	up to 55	1	5	1	1	1	2	1	1	1	1	1	1	1	1(16)	1	LQFP64	
	GD32F150R6T6	72	32K	6K	up to 55	1	5	1	1	1	2	1	2	1	1	1	1	1	1(16)	1	LQFP64	
	GD32F150R8T6	72	64K	8K	up to 55	1	5	1	1	1	2	1	2	2	2	1	1	1	1(16)	1	LQFP64	

Low-Power Consumption MCU

GD32L23x Series 32-bit Arm® Cortex®-M23 Low-Power Consumption MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer								Connectivity										Analog Interface		Package
			Flash	SRAM		LPTM (32bit)	LPTM (16bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	LP UART	I²C	SPI	USB 2.0	CAN 2.0B	I²S	Comp	Segment LCD	12bit ADC Units (CHs)	12bit DAC Units		
GD32L235	GD32L235E8Y6TR	64	64K	12K	up to 23		2	5	1	2	1	2	1	2+1	2	3	2		1	1	2		1(10)	1	WLCSP25	
	GD32L235EBY6TR	64	128K	24K	up to 23		2	6	1	2	1	2	1	2+2	2	3	2		1	1	2		1(10)	1	WLCSP25	
	GD32L235K8Q6	64	64K	12K	up to 29		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2		1(10)	1	QFN32	
	GD32L235KBQ6	64	128K	24K	up to 29		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2		1(10)	1	QFN32	
	GD32L235K8Q6P	64	64K	12K	up to 28		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2		1(10)	1	QFN32	
	GD32L235KBQ6P	64	128K	24K	up to 28		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2		1(10)	1	QFN32	
	GD32L235K8T6	64	64K	12K	up to 27		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2		1(10)	1	LQFP32	
	GD32L235KBT6	64	128K	24K	up to 27		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2		1(10)	1	LQFP32	
	GD32L235C8O6	64	64K	12K	up to 43		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2		1(10)	1	QFN48	
	GD32L235CBO6	64	128K	24K	up to 43		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2		1(10)	1	QFN48	
	GD32L235C8T6	64	64K	12K	up to 43		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2		1(10)	1	LQFP48	
	GD32L235CBT6	64	128K	24K	up to 43		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2		1(10)	1	LQFP48	
	GD32L235R8O6	64	64K	12K	up to 59		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2	8*28/4*32	1(16)	1	QFN64	
	GD32L235RBO6	64	128K	24K	up to 59		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2	8*28/4*32	1(16)	1	QFN64	
	GD32L235R8T6	64	64K	12K	up to 59		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2	8*28/4*32	1(16)	1	LQFP64	
	GD32L235RBT6	64	128K	24K	up to 59		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2	8*28/4*32	1(16)	1	LQFP64	
GD32L233	GD32L233K8Q6	64	64K	16K	up to 29	1		3	0	2	1	2	1	2+1	1	2	2	FS		1	2		1(10)	1	QFN32	
	GD32L233KBQ6	64	128K	24K	up to 29	1		3	0	2	1	2	1	2+1	1	2	2	FS		1	2		1(10)	1	QFN32	
	GD32L233K8T6	64	64K	16K	up to 27	1		3	0	2	1	2	1	2+1	1	2	2	FS		1	2		1(10)	1	LQFP32	
	GD32L233KBT6	64	128K	24K	up to 27	1		3	0	2	1	2	1	2+1	1	2	2	FS		1	2		1(10)	1	LQFP32	
	GD32L233C8T6	64	64K	16K	up to 43	1		3	0	2	1	2	1	2+1	1	2	2	FS		1	2		1(10)	1	LQFP48	
	GD32L233CBT6	64	128K	24K	up to 43	1		4	0	2	1	2	1	2+2	1	2	2	FS		1	2		1(10)	1	LQFP48	
	GD32L233CCT6	64	256K	32K	up to 43	1		4	0	2	1	2	1	2+2	1	2	2	FS		1	2		1(10)	1	LQFP48	
	GD32L233CCY6TR	64	256K	32K	up to 39	1		4	0	2	1	2	1	2+2	1	2	2	FS		1	2		1(10)	1	WLCSP49	
	GD32L233RCO6	64	256K	32K	up to 59	1		4	0	2	1	2	1	2+2	1	3	2	FS		1	2	8*28/4*32	1(16)	1	QFN64	
	GD32L233R8T6	64	64K	16K	up to 59	1		3	0	2	1	2	1	2+1	1	3	2	FS		1	2	8*28/4*32	1(16)	1	LQFP64	
	GD32L233RBT6	64	128K	24K	up to 59	1		4	0	2	1	2	1	2+2	1	3	2	FS		1	2	8*28/4*32	1(16)	1	LQFP64	
	GD32L233RCT6	64	256K	32K	up to 59	1		4	0	2	1	2	1	2+2	1	3	2	FS		1	2	8*28/4*32	1(16)	1	LQFP64	

Wireless MCU

GD32VW553 Series 32-bit RISC-V Wireless MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity													Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (64bit)	WDG	RTC	U(S)ART	I²C	SPI	USB 2.0 FS	I²S	QSPI	CAU	HAU	PKCAU	TRNG	IEEE 802.11	Bluetooth	12bit ADC Units (CHs)	12bit DAC Units		
GD32VW553	GD32VW553KIQ7	160	2048K	320K	up to 21	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN32	
	GD32VW553KMQ7	160	4096K	320K	up to 21	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN32	
	GD32VW553HIQ7	160	2048K	320K	up to 28	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN40	
	GD32VW553HMQ7	160	4096K	320K	up to 28	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN40	
	GD32VW553KIQ6	160	2048K	320K	up to 21	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN32	
	GD32VW553KMQ6	160	4096K	320K	up to 21	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN32	
	GD32VW553HIQ6	160	2048K	320K	up to 28	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN40	
	GD32VW553HMQ6	160	4096K	320K	up to 28	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN40	

GD32W515 Series 32-bit Arm® Cortex®-M33 Wireless MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity												Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART	I²C	SPI	USB 2.0 FS	I²S	SDIO	IEEE 802.11	QSPI	Digital filters	Digital Camera	HW Security	12bit ADC Units (CHs)	Cap.Touch Key		
GD32W515	GD32W515TGQ6	180	1024K	384K	up to 25	2	3	1	1	1	2	1	3	2	2	OTG	1	1	b/g/n	1			•	1(5)	7	QFN36	
	GD32W515TIQ6	180	2048K	448K	up to 25	2	3	1	1	1	2	1	3	2	2	OTG	1	1	b/g/n	1			•	1(5)	7	QFN36	
	GD32W515P0Q6	180	0K	448K	up to 43	2	4	1	1	1	2	1	3	2	2	OTG	1	1	b/g/n	1	•	•	•	1(9)	12	QFN56	
	GD32W515PIQ6	180	2048K	448K	up to 43	2	4	1	1	1	2	1	3	2	2	OTG	1	1	b/g/n	1	•	•	•	1(9)	12	QFN56	

Automotive MCU

GD32A7 Series
32-bit Arm® Cortex®-M7 Automotive MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Core Type	Memory (Bytes)			I/O	Timer						Connectivity										Analog Interface				Functional Safety	Security	Supply Voltage (V)	Temperature Range(TA)	Package
				Flash	Data-Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (32bit)	SysTick (24bit)	WDG	RTC	USART	I²C	SPI	QSPI	CAN-FD	LIN	Ethernet	MFCOM	SENT	12bit ADC Units	12bit ADC Channels	COMP	12bit DAC Units						
GD32A711	GD32A711ART3TA	120	Cortex-M7	1024K	128K+96K	128K	Up to 54	1	4	2	1	2	1	4	2	4	0	5	4	0	0	0	2	27	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.7~5.5	-40~125°C	LQFP64	
	GD32A711AVT3TA	120	Cortex-M7	1024K	128K+96K	128K	Up to 83	1	8	2	1	2	1	4	2	5	1	6	6	0	0	0	2	40	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.7~5.5	-40~125°C	LQFP100	
	GD32A711AZT3TA	120	Cortex-M7	1024K	128K+96K	128K	Up to 113	1	8	2	1	2	1	4	2	6	1	6	6	0	0	0	2	48	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.7~5.5	-40~125°C	LQFP144	
GD32A712	GD32A712AVT3TA	120	Cortex-M7	2048K	128K+96K	256K	Up to 83	1	8	2	1	2	1	4	2	5	1	6	6	0	0	0	2	40	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.7~5.5	-40~125°C	LQFP100	
	GD32A712AZT3TA	120	Cortex-M7	2048K	128K+96K	256K	Up to 113	1	8	2	1	2	1	4	2	6	1	6	6	0	0	0	2	48	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.7~5.5	-40~125°C	LQFP144	
	GD32A712AIT3TA	120	Cortex-M7	2048K	128K+96K	256K	Up to 146	1	8	2	1	2	1	4	2	6	1	6	6	0	0	0	2	48	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.7~5.5	-40~125°C	LQFP176	

Series	Part No.	Max Speed (MHz)	Core Type	Memory (Bytes)			I/O	Timer						Connectivity										Analog Interface				Functional Safety	Security	Supply Voltage (V)	Temperature Range(TA)	Package
				Flash	Data-Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (32bit)	SysTick (24bit)	WDG	RTC	USART	I²C	SPI	I²S	QSPI	CAN-FD	LIN	Ethernet	MFCOM	SENT	12bit ADC Units	12bit ADC Channels	12bit DAC Units	COMP					
GD32A714	GD32A714AVT3TA	160	Cortex-M7	4096K	128K+96K	512K	Up to 80	2	8	2	1	4	1	6	2	8	4	1	6	8	1	1	6	3	40	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP100
	GD32A714AZT3TA	160	Cortex-M7	4096K	128K+96K	512K	Up to 114	2	8	2	1	4	1	6	2	8	4	1	7	11	1	1	6	3	54	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP144
	GD32A714AIT3TA	160	Cortex-M7	4096K	128K+96K	512K	Up to 146	2	8	2	1	4	1	6	2	8	4	1	8	12	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP176
	GD32A714AXJ3TA	160	Cortex-M7	4096K	128K+96K	512K	Up to 218	2	8	2	1	4	1	6	2	8	4	1	8	12	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	BGA257
GD32A722	GD32A722AZT3TA	160	Dual Cortex-M7	2048K	128K+96K	256K	Up to 114	2	8	2	2	4	1	6	2	8	4	1	7	11	1	1	6	3	54	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP144
	GD32A722AIT3TA	160	Dual Cortex-M7	2048K	128K+96K	256K	Up to 146	2	8	2	2	4	1	6	2	8	4	1	8	12	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP176
	GD32A722AXJ3TA	160	Dual Cortex-M7	2048K	128K+96K	256K	Up to 218	2	8	2	2	4	1	6	2	8	4	1	8	12	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	BGA257
GD32A724	GD32A724AZT3TA	160	Dual Cortex-M7	4096K	128K+96K	512K	Up to 114	2	8	2	2	4	1	6	2	8	4	1	7	11	1	1	6	3	54	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP144
	GD32A724AIT3TA	160	Dual Cortex-M7	4096K	128K+96K	512K	Up to 146	2	8	2	2	4	1	6	2	8	4	1	8	12	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP176
	GD32A724AXJ3TA	160	Dual Cortex-M7	4096K	128K+96K	512K	Up to 218	2	8	2	2	4	1	6	2	8	4	1	8	12	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	BGA257
GD32A741	GD32A741AVT3TA	160	Lockstep Cortex-M7	1024K	128K+96K	128K	Up to 80	2	8	2	1	4	1	6	2	8	4	1	6	8	1	1	6	3	40	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP100
	GD32A741AZT3TA	160	Lockstep Cortex-M7	1024K	128K+96K	128K	Up to 114	2	8	2	1	4	1	6	2	8	4	1	7	11	1	1	6	3	54	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP144
	GD32A741AIT3TA	160	Lockstep Cortex-M7	1024K	128K+96K	128K	Up to 146	2	8	2	1	4	1	6	2	8	4	1	8	12	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP176
GD32A742	GD32A742AVT3TA	160	Lockstep Cortex-M7	2048K	128K+96K	256K	Up to 80	2	8	2	1	4	1	6	2	8	4	1	6	8	1	1	6	3	40	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP100
	GD32A742AZT3TA	160	Lockstep Cortex-M7	2048K	128K+96K	256K	Up to 114	2	8	2	1	4	1	6	2	8	4	1	7	11	1	1	6	3	54	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP144
	GD32A742AIT3TA	160	Lockstep Cortex-M7	2048K	128K+96K	256K	Up to 146	2	8	2	1	4	1	6	2	8	4	1	8	12	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP176
GD32A744	GD32A744AVT3TA	160	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 80	2	8	2	1	4	1	6	2	8	4	1	6	8	1	1	6	3	40	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP100
	GD32A744AZT3TA	160	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 114	2	8	2	1	4	1	6	2	8	4	1	7	11	1	1	6	3	54	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP144
	GD32A744AIT3TA	160	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 146	2	8	2	1	4	1	6	2	8	4	1	8	12	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	LQFP176
	GD32A744AXJ3TA	160	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 218	2	8	2	1	4	1	6	2	8	4	1	8	12	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125°C	BGA257

Automotive MCU

GD32A5 Series 32-bit Arm® Cortex®-M33 Automotive MCU Selection Guide



Series	Part No.	Max Speed (MHz)	Memory (Bytes)			I/O	Timer						Connectivity							Analog Interface		Package
			Flash	SRAM	Data-Flash /EEPROM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART /LIN	I²C	SPI	CAN2.0B	I²S	COMP	MFCOM	12bit ADC Units (CHs)	12bit DAC Units	
GD32A503	GD32A503KBU3	100	128K	24K	32K/2K	up to 27	1	3	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32A503KCU3	100	256K	32K	64K/4K	up to 27	1	4	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32A503CBT3	100	128K	24K	32K/2K	up to 42	1	3	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32A503CCT3	100	256K	32K	64K/4K	up to 42	1	4	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32A503RBT3	100	128K	24K	32K/2K	up to 57	1	3	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A503RCT3	100	256K	32K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A503RDT3	100	384K	48K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A503VBT3	100	128K	24K	32K/2K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32A503VCT3	100	256K	32K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32A503VDT3	100	384K	48K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
GD32A513	GD32A513KBU3	100	128K	24K	32K/2K	up to 27	1	3	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32A513KCU3	100	256K	32K	64K/4K	up to 27	1	4	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32A513CBT3	100	128K	24K	32K/2K	up to 42	1	3	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32A513CCT3	100	256K	32K	64K/4K	up to 42	1	4	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32A513RBT3	100	128K	24K	32K/2K	up to 57	1	3	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A513RCT3	100	256K	32K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A513RDT3	100	384K	48K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A513VBT3	100	128K	24K	32K/2K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32A513VCT3	100	256K	32K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32A513VDT3	100	384K	48K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100

GD32 MCU Package Options

LQFP176 (24*24mm)	LQFP144 (20*20mm)	LQFP100 (14*14mm)	LQFP64 (10*10mm)	LQFP48 (7*7mm)
LQFP32 (7*7mm)	BGA240 (14*14mm)	BGA176 (10*10mm)	BGA100 (7*7mm)	QFN64 (7*7mm)
QFN56 (7*7mm)	QFN48 (7*7mm)	QFN36 (6*6mm)	QFN32 (5*5mm)	QFN32 (4*4mm)
QFN28 (4*4mm)	QFN24 (3*3mm)	TSSOP24 (7.8*4.4mm)	TSSOP20 (6.5*4.4mm)	LGA20 (3*3mm)
WLCSP49 (3*3mm)	WLCSP25 (2*2mm)			

GD32 Development Ecosystem



Names and brands are the property of their respective owners.

Analog

Power Management

- Wireless Infrastructure
- Communication
- Industrial Application
- IPC
- IoT

Motor Driver

- BLDC/BDC/Stepper Motor
- Robotics and RC Toys
- Industrial Automation
- IoT

ASIC

- TWS Charging Box
- Wireless MIC
- Customized Solution
- PMIC for DDR

Battery Management

- Lithium Battery Protection and Charging
- IoT
- Cleaning Robots
- Energy Storage

Signal Chain

- Power System Measurement/Monitoring
- Multi-phase Motor Control
- Battery Formation/Power Storage
- Industrial Control

Power Management

GD30LD LDO Selection Guide

Part No.	V _{IN} (V)		V _{OUT} (V)		Output Current (A)	Dropout Voltage @ with BIAS (mV)	PSRR (db)	Output Voltage Noise (μVRMS)		Ground Current (mA)	Protection Features			Temperature Junction Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
	With BIAS	Without BIAS	Pin-selectable	Set by a Resistor Divider	Max			0.8V Output	5V Output		Current Limiting	Over Temperature	Power Good				
GD30LD3300FUTR	1.1~6.5	1.4~6.5	0.5~2.075	0.5~5.2	3	180	42@10kHz	5.9	9.8	3	•	•	•	-40°C ~125°C	QFN20	3000	3000
GD30LD3301FUTR	1.1~6.5	1.4~6.5	0.8~3.95	0.8~5.2	3	180	42@10kHz	5.9	9.8	3	•	•	•	-40°C ~125°C	QFN20	3000	3000
GD30LD3137WETR	1.1~6.5	1.4~6.5	-	0.8~5.5	1.2	70	40@500kHz	4.4	7.7	3	•	•	•	-40°C ~125°C	DFN8	3000	3000
GD30LD1003FUTY-I	1.1~6.5	1.4~6.5	0.8~3.95	0.8~5.2	2	125	39@ 500 KHz	5.9	9.8	3	•	•	•	-40°C ~125°C	QFN20	490	2940
GD30LD1030MUTR-I	1.1~6.5	1.4~6.5	0.5~2.075	0.5~5.2	3	180	39@ 500 KHz	5.9	9.8	3	•	•	•	-40°C ~125°C	QFN12	3000	3000

Part No.	V _{IN} (V)	V _{OUT} (V)		Output Current (A)	Dropout Voltage @ 2A (mV)	PSRR (db)	Ground Current (mA)	Protection Features			Temperature Junction Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
		Pin-selectable	Set by a Resistor Divider	Max				Current Limiting	Over Temperature	Power Good				
GD30LD1000WGTR-I	1.4~6.5	-	0.5~5.2	2	300	39@ 500 KHz	3	•	•		-40°C ~125°C	SOP8	4000	4000
GD30LD1000NBTR-I	1.4~6.5	-	0.5~5.2	2	300	39@ 500 KHz	3	•	•		-40°C ~125°C	TO263	3000	3000
GD30LD1001LUTR	1.4~6.5	0.5~2.075	0.5~5.2	2	180	39@ 500 KHz	3	•	•	•	-40°C ~125°C	QFN16	3000	3000
GD30LD1002WETR-I	1.4~6.5	-	0.5~5.2	1.2	200	39@ 500 KHz	3	•	•		-40°C ~125°C	DFN8	3000	3000
GD30LD1031NBTR-I	1.4~6.5	-	0.5~5.2	3	300	-	3	•	•		-40°C ~125°C	TO263	3000	3000

Power Management

GD30LD LDO Selection Guide

Part No.	V _{IN} (V)	V _{OUT} (V)	Output Current (A)	Dropout Voltage @0.2A (mV)	PSRR (db)	Ground Current (μA)	Shutdown Current (μA)	Protection Features		Temperature Junction Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
			Max				Max	Current Limiting	Over Temperature				
GD30LD2000NSTR-C08	1.9~5.5	0.8	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2000NSTR-C10	1.9~5.5	1	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2000NSTR-C12	1.9~5.5	1.2	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2000NSTR-C15	1.9~5.5	1.5	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2000NSTR-C18	1.9~5.5	1.8	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2000NSTR-C25	1.9~5.5	2.5	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2000NSTR-C28	1.9~5.5	2.8	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2000NSTR-C30	1.9~5.5	3	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2000NSTR-C33	1.9~5.5	3.3	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2000NSTR-C36	1.9~5.5	3.6	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2000BSTR-C08	1.9~5.5	0.8	0.3	180	50@1KHz	0.8	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2000BSTR-C10	1.9~5.5	1	0.3	180	50@1KHz	0.8	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2000BSTR-C12	1.9~5.5	1.2	0.3	180	50@1KHz	0.8	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2000BSTR-C15	1.9~5.5	1.5	0.3	180	50@1KHz	0.8	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2000BSTR-C18	1.9~5.5	1.8	0.3	180	50@1KHz	0.8	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2000BSTR-C25	1.9~5.5	2.5	0.3	180	50@1KHz	0.8	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2000BSTR-C28	1.9~5.5	2.8	0.3	180	50@1KHz	0.8	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2000BSTR-C30	1.9~5.5	3	0.3	180	50@1KHz	0.8	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2000BSTR-C33	1.9~5.5	3.3	0.3	180	50@1KHz	0.8	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2000BSTR-C36	1.9~5.5	3.6	0.3	180	50@1KHz	0.8	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2000JETR-C08	1.9~5.5	0.8	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2000JETR-C10	1.9~5.5	1	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2000JETR-C12	1.9~5.5	1.2	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2000JETR-C15	1.9~5.5	1.5	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2000JETR-C18	1.9~5.5	1.8	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2000JETR-C25	1.9~5.5	2.5	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2000JETR-C28	1.9~5.5	2.8	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2000JETR-C30	1.9~5.5	3	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2000JETR-C33	1.9~5.5	3.3	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2000JETR-C36	1.9~5.5	3.6	0.3	180	50@1KHz	0.8	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2001NSTR-I12	2.5~5.5	1.2	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2001NSTR-I15	2.5~5.5	1.5	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2001NSTR-I18	2.5~5.5	1.8	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	SOT235	3000	3000

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Part No.	V _{IN} (V)	V _{OUT} (V)	Output Current (A)	Dropout Voltage @0.2A (mV)	PSRR (db)	Ground Current (μA)	Shutdown Current (μA)	Protection Features		Temperature Junction Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
			Max				Max	Current Limiting	Over Temperature				
GD30LD2001NSTR-I25	2.5-5.5	2.5	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2001NSTR-I28	2.5-5.5	2.8	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2001NSTR-I30	2.5-5.5	3	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2001NSTR-I33	2.5-5.5	3.3	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2001NSTR-I36	2.5-5.5	3.6	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2001NSTR-I50	2.5-5.5	5	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2001BSTR-I12	2.5-5.5	1.2	0.3	270	60@1KHz	0.3	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2001BSTR-I15	2.5-5.5	1.5	0.3	270	60@1KHz	0.3	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2001BSTR-I18	2.5-5.5	1.8	0.3	270	60@1KHz	0.3	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2001BSTR-I25	2.5-5.5	2.5	0.3	270	60@1KHz	0.3	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2001BSTR-I28	2.5-5.5	2.8	0.3	270	60@1KHz	0.3	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2001BSTR-I30	2.5-5.5	3	0.3	270	60@1KHz	0.3	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2001BSTR-I33	2.5-5.5	3.3	0.3	270	60@1KHz	0.3	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2001BSTR-I36	2.5-5.5	3.6	0.3	270	60@1KHz	0.3	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2001BSTR-I50	2.5-5.5	5	0.3	270	60@1KHz	0.3	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2001JETR-I12	2.5-5.5	1.2	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2001JETR-I15	2.5-5.5	1.5	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2001JETR-I18	2.5-5.5	1.8	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2001JETR-I25	2.5-5.5	2.5	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2001JETR-I28	2.5-5.5	2.8	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2001JETR-I30	2.5-5.5	3	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2001JETR-I33	2.5-5.5	3.3	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2001JETR-I36	2.5-5.5	3.6	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2001JETR-I50	2.5-5.5	5	0.3	270	60@1KHz	0.3	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010NSTR-I08	1.5~7.0	0.8	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2010NSTR-I10	1.5~7.0	1	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2010NSTR-I12	1.5~7.0	1.2	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2010NSTR-I15	1.5~7.0	1.5	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2010NSTR-I18	1.5~7.0	1.8	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2010NSTR-I25	1.5~7.0	2.5	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2010NSTR-I28	1.5~7.0	2.8	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2010NSTR-I30	1.5~7.0	3	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2010NSTR-I33	1.5~7.0	3.3	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000

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Part No.	V _{IN} (V)	V _{OUT} (V)	Output Current (A)	Dropout Voltage @0.2A (mV)	PSRR (db)	Ground Current (μA)	Shutdown Current (μA)	Protection Features		Temperature Junction Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
			Max				Max	Current Limiting	Over Temperature				
GD30LD2010NSTR-I36	1.5~7.0	3.6	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2010NSTR-I50	1.5~7.0	5	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2010JETR-I08	1.5~7.0	0.8	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010JETR-I10	1.5~7.0	1	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010JETR-I12	1.5~7.0	1.2	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010JETR-I15	1.5~7.0	1.5	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010JETR-I18	1.5~7.0	1.8	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010JETR-I25	1.5~7.0	2.5	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010JETR-I28	1.5~7.0	2.8	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010JETR-I30	1.5~7.0	3	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010JETR-I33	1.5~7.0	3.3	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010JETR-I36	1.5~7.0	3.6	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2010JETR-I50	1.5~7.0	5	0.5	520	87@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2011NSTR-I12	1.8~7.0	1.2	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2011NSTR-I15	1.8~7.0	1.5	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2011NSTR-I18	1.8~7.0	1.8	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2011NSTR-I25	1.8~7.0	2.5	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2011NSTR-I28	1.8~7.0	2.8	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2011NSTR-I30	1.8~7.0	3	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2011NSTR-I33	1.8~7.0	3.3	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2011NSTR-I36	1.8~7.0	3.6	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2011NSTR-I42	1.8~7.0	4.2	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2011NSTR-I50	1.8~7.0	5	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2011JETR-I12	1.8~7.0	1.2	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2011JETR-I15	1.8~7.0	1.5	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2011JETR-I18	1.8~7.0	1.8	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2011JETR-I25	1.8~7.0	2.5	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2011JETR-I28	1.8~7.0	2.8	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2011JETR-I30	1.8~7.0	3	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2011JETR-I33	1.8~7.0	3.3	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2011JETR-I36	1.8~7.0	3.6	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2011JETR-I42	1.8~7.0	4.2	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2011JETR-I50	1.8~7.0	5	0.5	270	80@1KHz	40	0.1	•	•	-40°C ~125°C	DFN 1x1	10000	10000

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Part No.	V _{IN} (V)	V _{OUT} (V)	Output Current (A)	Dropout Voltage @0.2A (mV)	PSRR (db)	Ground Current (μA)	Shutdown Current (μA)	Protection Features		Temperature Junction Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
			Max				Max	Current Limiting	Over Temperature				
GD30LD2100BSTR-I15	2.3-10	1.5	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT233	3000	3000
GD30LD2100BSTR-I18	2.3-10	1.8	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT233	3000	3000
GD30LD2100BSTR-I28	2.3-10	2.8	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT233	3000	3000
GD30LD2100BSTR-I30	2.3-10	3	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT233	3000	3000
GD30LD2100BSTR-I33	2.3-10	3.3	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT233	3000	3000
GD30LD2100BSTR-I50	2.3-10	5	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT233	3000	3000
GD30LD2100NSTR-I15	2.3-10	1.5	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	SOT235	3000	3000
GD30LD2100NSTR-I18	2.3-10	1.8	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	SOT235	3000	3000
GD30LD2100NSTR-I28	2.3-10	2.8	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	SOT235	3000	3000
GD30LD2100NSTR-I30	2.3-10	3	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	SOT235	3000	3000
GD30LD2100NSTR-I33	2.3-10	3.3	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	SOT235	3000	3000
GD30LD2100NSTR-I50	2.3-10	5	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	SOT235	3000	3000
GD30LD2100BWTR-I15	2.3-10	1.5	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT893	3000	3000
GD30LD2100BWTR-I18	2.3-10	1.8	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT893	3000	3000
GD30LD2100BWTR-I28	2.3-10	2.8	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT893	3000	3000
GD30LD2100BWTR-I30	2.3-10	3	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT893	3000	3000
GD30LD2100BWTR-I33	2.3-10	3.3	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT893	3000	3000
GD30LD2100BWTR-I50	2.3-10	5	0.4	300	76@1KHz	2.1	-	•	•	-40°C ~85°C	SOT893	3000	3000
GD30LD2100JETR-I15	2.3-10	1.5	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	DFN 1x1	10000	10000
GD30LD2100JETR-I18	2.3-10	1.8	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	DFN 1x1	10000	10000
GD30LD2100JETR-I28	2.3-10	2.8	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	DFN 1x1	10000	10000
GD30LD2100JETR-I30	2.3-10	3	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	DFN 1x1	10000	10000
GD30LD2100JETR-I33	2.3-10	3.3	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	DFN 1x1	10000	10000
GD30LD2100JETR-I50	2.3-10	5	0.4	300	76@1KHz	2.1	0.1	•	•	-40°C ~85°C	DFN 1x1	10000	10000
GD30LD2400BSTR-I18	2.5~45	1.8	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2400BSTR-I25	2.5~45	2.5	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2400BSTR-I30	2.5~45	3	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2400BSTR-I33	2.5~45	3.3	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2400BSTR-I36	2.5~45	3.6	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2400BSTR-I50	2.5~45	5	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2400NSTR-I18	2.5~45	1.8	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2400NSTR-I25	2.5~45	2.5	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2400NSTR-I30	2.5~45	3	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000

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Part No.	V _{IN} (V)	V _{OUT} (V)	Output Current (A)	Dropout Voltage @0.2A (mV)	PSRR (db)	Ground Current (μA)	Shutdown Current (μA)	Protection Features		Temperature Junction Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
			Max				Max	Current Limiting	Over Temperature				
GD30LD2400NSTR-I33	2.5~45	3.3	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2400NSTR-I36	2.5~45	3.6	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2400NSTR-I50	2.5~45	5	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2400BWTR-I18	2.5~45	1.8	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2400BWTR-I25	2.5~45	2.5	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2400BWTR-I30	2.5~45	3	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2400BWTR-I33	2.5~45	3.3	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2400BWTR-I36	2.5~45	3.6	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2400BWTR-I50	2.5~45	5	0.35	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2400JETR-I18	2.5~45	1.8	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2400JETR-I25	2.5~45	2.5	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2400JETR-I30	2.5~45	3	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2400JETR-I33	2.5~45	3.3	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2400JETR-I36	2.5~45	3.6	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2400JETR-I50	2.5~45	5	0.35	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2401BSTR-I18	2.5~36	1.8	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2401BSTR-I25	2.5~36	2.5	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2401BSTR-I30	2.5~36	3	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2401BSTR-I33	2.5~36	3.3	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2401BSTR-I36	2.5~36	3.6	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2401BSTR-I50	2.5~36	5	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2401NSTR-I18	2.5~36	1.8	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2401NSTR-I25	2.5~36	2.5	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2401NSTR-I30	2.5~36	3	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2401NSTR-I33	2.5~36	3.3	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2401NSTR-I36	2.5~36	3.6	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2401NSTR-I50	2.5~36	5	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2401BWTR-I18	2.5~36	1.8	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2401BWTR-I25	2.5~36	2.5	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2401BWTR-I30	2.5~36	3	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2401BWTR-I33	2.5~36	3.3	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2401BWTR-I36	2.5~36	3.6	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2401BWTR-I50	2.5~36	5	0.25	690	60@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000

Power Management

GD30LD LDO Selection Guide

Part No.	V _{IN} (V)	V _{OUT} (V)	Output Current (A)	Dropout Voltage @0.2A (mV)	PSRR (db)	Ground Current (μA)	Shutdown Current (μA)	Protection Features		Temperature Junction Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
			Max				Max	Current Limiting	Over Temperature				
GD30LD2401JETR-I18	2.5~36	1.8	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2401JETR-I25	2.5~36	2.5	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2401JETR-I30	2.5~36	3	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2401JETR-I33	2.5~36	3.3	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2401JETR-I36	2.5~36	3.6	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2401JETR-I50	2.5~36	5	0.25	690	60@1KHz	2.5	1	•	•	-40°C ~125°C	DFN 1x1	10000	10000
GD30LD2402BSTR-I30	3.0~30	3	0.2	1200	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2402BSTR-I33	3.0~30	3.3	0.2	1200	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2402BSTR-I36	3.0~30	3.6	0.2	1200	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2402BSTR-I50	3.0~30	5	0.2	1000	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2402NSTR-S30	3.0~30	3	0.2	1200	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2402NSTR-S33	3.0~30	3.3	0.2	1200	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2402NSTR-S36	3.0~30	3.6	0.2	1200	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2402NSTR-S50	3.0~30	5	0.2	1000	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2402BWTR-S30	3.0~30	3	0.2	1200	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2402BWTR-S33	3.0~30	3.3	0.2	1200	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2402BWTR-S36	3.0~30	3.6	0.2	1200	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2402BWTR-S50	3.0~30	5	0.2	1000	40@1KHz	1.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2405BSTR-I30	3.0~40	3	0.25	1060	57@1KHz	2	-	•	•	-40°C ~85°C	SOT233	3000	3000
GD30LD2405BSTR-I33	3.0~40	3.3	0.25	1060	57@1KHz	2	-	•	•	-40°C ~85°C	SOT233	3000	3000
GD30LD2405BSTR-I50	3.0~40	5	0.25	1060	57@1KHz	2	-	•	•	-40°C ~85°C	SOT233	3000	3000
GD30LD2405NSTR-S30	3.0~40	3	0.25	1060	57@1KHz	2	-	•	•	-40°C ~85°C	SOT235	3000	3000
GD30LD2405NSTR-S33	3.0~40	3.3	0.25	1060	57@1KHz	2	-	•	•	-40°C ~85°C	SOT235	3000	3000
GD30LD2405NSTR-S50	3.0~40	5	0.25	1060	57@1KHz	2	-	•	•	-40°C ~85°C	SOT235	3000	3000
GD30LD2406BSTR-I30	3.0~40	3	0.2	1600	70@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2406BSTR-I33	3.0~40	3.3	0.2	1600	70@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2406BSTR-I50	3.0~40	5	0.2	1600	70@1KHz	2.5	-	•	•	-40°C ~125°C	SOT233	3000	3000
GD30LD2406NSTR-I30	3.0~40	3	0.2	1600	70@1KHz	2.5	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2406NSTR-I33	3.0~40	3.3	0.2	1600	70@1KHz	2.5	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2406NSTR-I50	3.0~40	5	0.2	1600	70@1KHz	2.5	0.1	•	•	-40°C ~125°C	SOT235	3000	3000
GD30LD2406BWTR-I30	3.0~40	3	0.2	1600	70@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2406BWTR-I33	3.0~40	3.3	0.2	1600	70@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000
GD30LD2406BWTR-I50	3.0~40	5	0.2	1600	70@1KHz	2.5	-	•	•	-40°C ~125°C	SOT893	1000	1000

Power Management

GD30DC DC/DC Converter Selection Guide

Part No.	Function	Supply Voltage (V)		Output Current (A)	Ron (mΩ)		Reference Voltage (V)	Quiescent Current (μA)	Switching Frequency (MHz)	100% Duty Cycle	Protection Features				Note	Temperature Operating Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
		Min	Max	Max	HSFET	LSFET	Typ	Typ	Typ		Over Voltage	Over Current	Hiccup Short Circuit	Over Temperature					
GD30DC1101NSTR-I	BUCK	2.5	5.5	1	250	200	0.6	25	1.5	•	•	•	•	•	SS/Comp./Current Mode	-40°C ~85°C	SOT235	3000	3000
GD30DC1101SSTR-I	BUCK	2.5	5.5	1	250	200	0.6	25	1.5	•	•	•	•	•	SS/Comp./Current Mode	-40°C ~85°C	SOT236	3000	3000
GD30DC1105NSTR-I	BUCK	2.5	5.5	1.2	250	200	0.6	25	1.5	•	•	•	•	•	SS/Comp./Current Mode	-40°C ~85°C	SOT235	3000	3000
GD30DC1103NSTR-I	BUCK	2.5	6	1	200	150	0.6	25	1.5	•	•	•	•	•	SS/Comp./Current Mode	-40°C ~85°C	SOT235	3000	3000
GD30DC1107NSTR-I	BUCK	2.5	6	1	200	150	0.6	-	1.5	•	•	•	•	•	SS/Comp./Current Mode/FCCM	-40°C ~85°C	SOT235	3000	3000
GD30DC1103SOTR-I	BUCK	2.5	6	1	200	150	0.6	25	1.5	•	•	•	•	•	SS/Comp./Current Mode	-40°C ~85°C	SOT563	5000	5000
GD30DC1106NSTR-I	BUCK	2.5	6	1.2	200	150	0.6	25	1.5	•	•	•	•	•	SS/Comp./Current Mode	-40°C ~85°C	SOT235	3000	3000
GD30DC1109NSTR-I	BUCK	2.5	6	1.2	200	150	0.6	-	1.5	•	•	•	•	•	SS/Comp./Current Mode/FCCM	-40°C ~85°C	SOT235	3000	3000
GD30DC1104NSTR-I	BUCK	2.7	5.75	2	65	60	0.6	35	1.5	•	•	•	•	•	SS/Comp./Current Mode	-40°C ~85°C	SOT235	3000	3000
GD30DC1108NSTR-I	BUCK	2.7	5.75	2	65	60	0.6	-	1.5	•	•	•	•	•	SS/Comp./Current Mode/FCCM	-40°C ~85°C	SOT235	3000	3000
GD30DC1301SOTR-I	BUCK	4.5	18	2	110	60	0.8	250	0.8	-	•	•	•	•	ACOT	-40°C ~85°C	SOT563	5000	5000
GD30DC1301SSTR-I	BUCK	4.5	18	2	110	60	0.8	250	0.8	-	•	•	•	•	ACOT	-40°C ~85°C	SOT236	3000	3000
GD30DC1301SOTR-S	BUCK	4.5	18	2	110	60	0.8	250	0.8	-	•	•	•	•	ACOT	-40°C ~85°C	SOT563	5000	5000
GD30DC1301SSTR-S	BUCK	4.5	18	2	110	60	0.8	250	0.8	-	•	•	•	•	ACOT	-40°C ~85°C	SOT236	3000	3000
GD30DC1307SSTR-I06	BUCK	4.2	18	2	113	80	0.6	250	0.6	-	•	•	•	•	ACOT	-40°C ~85°C	SOT236	3000	3000
GD30DC1307SSTR-I12	BUCK	4.2	18	2	113	80	0.6	250	1.2	-	•	•	•	•	ACOT	-40°C ~85°C	SOT236	3000	3000
GD30DC1314SSTR-I06	BUCK	4.2	18	2	113	80	0.765	250	0.6	-	•	•	•	•	ACOT	-40°C ~85°C	SOT236	3000	3000
GD30DC1300SOTR-I	BUCK	4.5	18	3	80	45	0.8	250	0.8	-	•	•	•	•	ACOT	-40°C ~85°C	SOT563	5000	5000
GD30DC1300SSTR-I	BUCK	4.5	18	3	80	45	0.8	250	0.8	-	•	•	•	•	ACOT	-40°C ~85°C	SOT236	3000	3000
GD30DC1300SOTR-S	BUCK	4.5	18	3	80	45	0.8	250	0.8	-	•	•	•	•	ACOT	-40°C ~85°C	SOT563	5000	5000
GD30DC1300SSTR-S	BUCK	4.5	18	3	80	45	0.8	250	0.8	-	•	•	•	•	ACOT	-40°C ~85°C	SOT236	3000	3000
GD30DC1318SSTR-I06	BUCK	4.5	18	3	95	60	0.6	250	0.6	-	•	•	•	•	ACOT	-40°C ~85°C	SOT236	3000	3000
GD30DC1309ZUTR-I	BUCK	4.5	18	6	21	16	0.6	750	0.2-1.6	•	•	•	•	•	SS/Comp./Current Mode/FCCM	-40°C ~150°C	QFN14	3000	3000
GD30DC1350SSTR-I	BUCK	4.5	25	3	50	40	0.6	175	0.5	-	•	•	•	•	ACOT	-40°C ~85°C	SOT236	3000	3000

Part No.	Function	Supply Voltage (V)		Output Voltage (V)	Limit Current (A)	Power Mos H(mΩ)	Power Mos L (mΩ)	Reference Voltage (V)	Quiescent Current (μA)	Switching Frequency (MHz)	Protection Features			Note	Temperature Operating Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
		Min	Max	Max	Max			Typ	Typ	Typ	Under Voltage	Over Current	Over Temperature					
GD30DC2300SSTR-N	BOOST	2.5	18	30	3	-	150	0.6	110	1	•	•	•	Current Mode	-20°C ~85°C	SOT236	3000	3000
GD30DC2301SSTR-N	BOOST	2.5	18	36	2	-	150	0.2	110	1	•	•	•	Current Mode	-20°C ~85°C	SOT236	3000	3000
GD30DC2101SSTR-I	BOOST	0.9	5.5	5.5	1.2	600	300	0.5	1	1	•	•	•	Current Mode	-40°C ~125°C	SOT236	3000	3000
GD30DC2100SSTR-I	BOOST	0.9	5.5	5.5	1.2	600	300	0.5	1	1	•	•	•	Current Mode	-40°C ~125°C	SOT236	3000	3000

Power Management

GD30VR Vref Selection Guide

Part No.	Power Supply (V)	Output Voltage (V)	Temp Drift (ppm/°C)	Initial Accuracy (%)	Current Load (mA)	Noise μ Vpp (V)	Temperature Operating Range (°C)	Package	MOQ (PCS)
GD30VR3100WGTR-I20	2.7~18V	2.048	3	0.05	+/-10	1.5	-40°C ~125°C	SOP8	3000
GD30VR1100WGTR-I20	2.7~18V	2.048	8	0.1	+/-10	1.5	-40°C ~125°C	SOP8	3000
GD30VR3100WGTR-I25	2.7~18V	2.5	3	0.05	+/-10	1.5	-40°C ~125°C	SOP8	3000
GD30VR1100WGTR-I25	2.7~18V	2.5	8	0.1	+/-10	1.5	-40°C ~125°C	SOP8	3000
GD30VR3100WGTR-I30	3.2~18V	3	3	0.05	+/-10	1.5	-40°C ~105°C	SOP8	3000
GD30VR1100WGTR-I30	3.2~18V	3	8	0.1	+/-10	1.5	-40°C ~105°C	SOP8	3000
GD30VR3100WGTR-I40	4.296~18V	4.096	3	0.05	+/-10	1.5	-40°C ~125°C	SOP8	3000
GD30VR1100WGTR-I40	4.296~18V	4.096	8	0.1	+/-10	1.5	-40°C ~125°C	SOP8	3000
GD30VR3100WGTR-I45	4.7~18V	4.5	3	0.05	+/-10	1.5	-40°C ~125°C	SOP8	3000
GD30VR1100WGTR-I45	4.7~18V	4.5	8	0.1	+/-10	1.5	-40°C ~125°C	SOP8	3000
GD30VR3100WGTR-I50	5.2~18V	5	3	0.05	+/-10	1.5	-40°C ~125°C	SOP8	3000
GD30VR1100WGTR-I50	5.2~18V	5	8	0.1	+/-10	1.5	-40°C ~125°C	SOP8	3000
GD30VR1100WMTR-I20	2.7~18V	2.048	8	0.1	+/-10	1.5	-40°C ~125°C	MSOP8	3000
GD30VR1100WMTR-I25	2.7~18V	2.5	8	0.1	+/-10	1.5	-40°C ~125°C	MSOP8	3000
GD30VR1100WMTR-I30	3.2~18V	3	8	0.1	+/-10	1.5	-40°C ~105°C	MSOP8	3000
GD30VR1100WMTR-I40	4.296~18V	4.096	8	0.1	+/-10	1.5	-40°C ~105°C	MSOP8	3000
GD30VR1100WMTR-I45	4.7~18V	4.5	8	0.1	+/-10	1.5	-40°C ~125°C	MSOP8	3000
GD30VR1100WMTR-I50	5.2~18V	5	8	0.1	+/-10	1.5	-40°C ~125°C	MSOP8	3000
GD30VR1000BSTR-I20	2.2~5.5	2.048	15	0.1	+/-10	10	-40°C ~125°C	SOT23-3	3000
GD30VR1000BSTR-I25	2.7~5.5	2.5	15	0.1	+/-10	10	-40°C ~125°C	SOT23-3	3000
GD30VR1000BSTR-I30	3.2~5.5	3	15	0.1	+/-10	10	-40°C ~125°C	SOT23-3	3000
GD30VR1000BSTR-I33	3.5~5.5	3.3	15	0.1	+/-10	10	-40°C ~125°C	SOT23-3	3000
GD30VR1000BSTR-I40	4.2~5.5	4.096	15	0.1	+/-10	10	-40°C ~125°C	SOT23-3	3000
GD30VR1000BSTR-I50	5.2~5.5	4	15	0.1	+/-10	10	-40°C ~125°C	SOT23-3	3000

ASIC

GD30WS TWS Charging Selection Guide

Part No.	Absolute V_{USB} (V)	Control Topology	Charging Current (A)	Load Current (A)	Charging Efficiency (%)	CV Charge Voltage (V)	Quiescent Current (μ A)	LDO	Control Interface	12bit ADC	Protection Features						Temperature Operating Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
	Max		Max	Max	Max						Short Circuit	Over Voltage	Under Voltage	Over Current	Over Temperature	Under Temperature				
GD30WS8805EU	20	Switch-Mode	1.2	0.6	95	4.1/4.2/4.3/4.35/4.4 @0.5%	<5	3.3V/50mA	I ² C	•	•	•	•	•	•	•	-20°C ~85°C	QFN24	490	2940
GD30WS8815EU	20	Switch-Mode	1.5	1	95	4.1/4.2/4.3/4.35/4.4 @0.5%	<5	3.3V/80mA	I ² C	•	•	•	•	•	•	•	-20°C ~85°C	QFN24	490	2940
GD30WS8855EU	30	Switch-Mode	1.5	1	95	4.1/4.2/4.3/4.35/4.4 @0.5%	<5	3.3V/50mA	I ² C	•	•	•	•	•	•	•	-20°C ~85°C	QFN24	490	2940

Motor Driver

GD30DR Motor Driver Selection Guide

Part No.	Supply Voltage (V)		Gate Driver	Power MOSFET	Gate Driver Peak Current (A)		Control Interface	PWM Frequency (kHz)	Buck Controller	LDO	Protection Features			Temperature Operating Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
	Min	Max			Source	Sink		Max			Under Voltage	Over Temperature	Fault Diagnostics				
GD30DR8306KU	4.5	30	3	External	1	1.2	6xPWM	200	5V/2A	5V/40mA	•	•	•	-40°C ~105°C	QFN32	490	2940
GD30DR8304EUTR	4.5	30	3	External	1	1.2	6xPWM	200	-	5V/40mA	•	•	•	-40°C ~105°C	QFN24	3000	3000
GD30DR1488FPTR-K	4	18	3	External	1	1.3	6xPWM	500	-	-	•	-	-	-40°C ~125°C	TSSOP20	4000	4000
GD30DR1488EUTR-K	4	18	3	External	1	1.3	6xPWM	500	-	-	•	-	-	-40°C ~125°C	QFN24	5000	5000

Part No.	Supply Voltage (V)		Gate Driver	Power MOSFET	Drive Current (A)	Control Interface	PWM Frequency (kHz)	LDO	Protection Features	Temperature Junction Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
	Min	Max					Max		Over Temperature				
GD30DR8413EUTR	4.5	30	-	Internal	3	3xPWM	50	5V/20mA	•	-40°C ~125°C	QFN24	3000	3000
GD30DR3000WGTR-K	6.5	40	-	Internal	3.2	PWM	100	-	•	-40°C ~125°C	ESOP8	4000	4000
GD30DR3001WGTR-K	4.5	40	-	Internal	6A Peak 4A Continuous	PWM	200	-	•	-40°C ~125°C	EP-SOP8	4000	4000
GD30DR3002WGTR-K	4.5	40	-	Internal	6A Peak 4A Continuous	PWM	200	-	•	-40°C ~125°C	EP-SOP8	4000	4000
GD30DR3003WGTR-K	4.5	40	-	Internal	6A Peak 4A Continuous	PWM	200	-	•	-40°C ~125°C	EP-SOP8	4000	4000
GD30DR3820LPTR-K	2.5	10.8	-	Internal	1.2	PWM	200	-	•	-40°C ~125°C	eTSSOP16	3000	3000
GD30DR3820LUTR-K	2.5	10.8	-	Internal	1.2	PWM	200	-	•	-40°C ~125°C	QFN16	3000	3000
GD30DR3800WETR-K	0	11	-	Internal	1.8	PWM	250	-	•	-40°C ~125°C	DFN8	3000	3000
GD30DR3800WGTR-K	0	11	-	Internal	1.8	PWM	250	-	•	-40°C ~125°C	SOP8	3000	3000
GD30DR3801WETR-K	0	10	-	Internal	1.0	PWM	250	-	•	-40°C ~125°C	DFN8	3000	3000

Part No.	Supply Voltage (V)		Power MOSFET	Output Peak Current (A)		Control Interface	PWM Frequency (kHz)	Core	Core Operation Frequency(kHz)	Flash (Kb)	Protection Features			Temperature Operating Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
	Min	Max		Source	Sink		Max		Max		Under Voltage	Over Temperature	Fault Diagnostics				
GD30DRE518QUTR-K	4	18	External	1	1.3	6xPWM	500	Cortex-M33	180	512	•	-	-	-40°C ~105°C	QFN88	3000	3000
GD30DRE231HUTR-J	4.5	30	Internal	-	-	3xPWM	200	Cortex-M23	72	64	-	•	-	-40°C ~85°C	QFN40	5000	5000
GD30DRE230HUTY-J	4.5	30	External	1	1.2	6xPWM	200	Cortex-M23	72	64	•	•	•	-40°C ~85°C	QFN40	2940	2940
GD30DRE230HUTR-J	4.5	30	External	1	1.2	6xPWM	200	Cortex-M23	72	64	•	•	•	-40°C ~85°C	QFN40	5000	5000

Battery Management

GD30BC Li-ion Charger IC Selection Guide

Part No.	Series Cells	Input Operation Voltage (V)		Control Topology	Charging Current (A)	Charging Efficiency (%)	CV Charge Voltage for Per Cell (V)	LDO	Power Path	Control Interface	Protection Features				Temperature Operating Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
		Min	Max		Max	Max					Over Voltage	Under Voltage	Over Current	Battery Over/Under Temperature				
GD30BC2501LRTR	4,6	18	32	Buck	5	95	4.1/4.2/4.3/4.35@1%	3.3V/25mA	NO	I ² C	•	•	•	•	-40°C ~85°C	QFN16	3000	3000
GD30BC2502LRTR	2,3,5	9	32	Buck	5	95	4.1/4.2/4.3/4.35@1%	3.3V/25mA	NO	I ² C	•	•	•	•	-40°C ~85°C	QFN16	3000	3000
GD30BC2416FUTR	1	4.4	5.5	Buck(Charging)-Boost(Discharging)	1.5	97	4.1/4.2/4.3/4.35/4.4@0.5%	3.3V/50mA	YES	I ² C	•	•	•	-	-20°C ~85°C	QFN20	3000	3000

Part No.	Absolute V _{USB} (V)	Control Topology	Charging Current (A)	Load Current (A)	CV Charge Voltage (V)	Quiescent Current (μA)	LDO	Control Interface	Protection Features						Temperature Operating Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
	Max								Short Circuit	Over Voltage	Under Voltage	Over Current	Over Temperature	Under Temperature				
GD30WS8663DYTR-I	36	Linear-Mode	8~456mA (8mA/step)	0.4~3.2A (0.2A/step)	3.6~4.545 (15mV/step) @0.5%	<0.4	3.3V/50mA	I ² C	•	•	•	•	•	•	-40°C ~125°C	WLCSP9	3000	3000
GD30BC1502NSTR-I	36	Linear-Mode	0.6	-	4.2	<1	-	-	•	•	•	•	•	•	-40°C ~125°C	SOT235	3000	3000
GD30BC1502NSTR-I1D	36	Linear-Mode	0.6	-	4.35	<1	-	-	•	•	•	•	•	•	-40°C ~125°C	SOT235	3000	3000
GD30BC1500NSTR-I	36	Linear-Mode	0.8	-	4.2	<1	-	-	•	•	•	•	•	•	-40°C ~125°C	SOT235	3000	3000
GD30BC1501WGTR-I	36	Linear-Mode	1	-	4.2	<1	-	EN	•	•	•	•	•	•	-40°C ~125°C	ESOP8	4000	4000
GD30BC1501WGTR-I1D	36	Linear-Mode	1	-	4.35	<1	-	EN	•	•	•	•	•	•	-40°C ~125°C	ESOP8	4000	4000

GD30SP Over Voltage Protector Selection Guide

Part No.	Input Operation Voltage (V)		MAX Output Current (A)	Over Voltage Protection (V)	Charging Efficiency (%)	Internal Switch ON Resistance (mΩ)	Quiescent Current (μA)	Protection Features			Temperature Operating Range (°C)	Package	MPQ (PCS)	MOQ (PCS)
	Min	Max		Min	Max			Over Current	Over Current	Over Temperature				
GD30SP2200WFTR	2.5	30	3	4	15	50	100	•	•	•	-40°C ~85°C	DFN8L	3000	3000
GD30SP2201WFTR-I	2.5	30	1.5	-	6	85	110	•	•	•	-40°C ~85°C	DFN8L	3000	3000

Signal Chain

GD30AD ADC Selection Guide

Part No.	Analog Supply (V)	Digital Supply (V)	Channel	Resolution (bit)	Max Smpling Rate (KSPS)	Input Range (V)	SNR (dB)	THD (dB)	INL (LSB)	Power (mW)	Interface Type	Temperature Operating Range (°C)	Package	MOQ (PCS)
GD30AD3380RWTR-I05	4.5~5.5	1.71~3.6	8	16	500	+/-12.5V, +/-10V +/-5V, +/-2.5V	91	-105	+/-1	53	SPI / Parallel	-40°C ~125°C	LQFP64	1500
GD30AD3380RWTR-I10	4.5~5.5	1.71~3.6	8	16	1000	+/-12.5V, +/-10V +/-5V, +/-2.5V	91	-105	+/-1	53	SPI / Parallel	-40°C ~125°C	LQFP64	1500
GD30AD33G0VWTR-I10	4.5~5.5	2.3~3.6	16	16	1000	+/-10V +/-5V, +/-2.5V	90.5	-102	+/-1	160	SPI / Parallel	-40°C ~125°C	LQFP80	1000
GD30AD33G1VWTR-I10	4.5~5.5	2.3~3.6	16	16	1000	+/-10V +/-5V, +/-2.5V	90.5	-102	+/-1	160	SPI / Parallel SPI CS full function	-40°C ~125°C	LQFP80	1000
GD30AD3382FUTR-I02	4.5~5.5	1.8~5.8	8	16	250	SE: 0~4.096 Diff: +/-2.048	90.5	-110	+/-0.5	12.5	SPI	-40°C ~105°C	QFN20	3000
GD30AD3382FUTR-I05	4.5~5.5	1.8~5.8	8	16	500	SE: 0~4.096 Diff: +/-2.048	90.5	-110	+/-0.5	26	SPI	-40°C ~105°C	QFN20	3000
GD30AD3340AMTR-I	2.2~5.5	NA	4 SE, 2 Diff	16	1	+/-0.064~+/-6.144	NA	NA	+/-8ppm/FS	0.9	I ² C	-40°C ~125°C	MSOP10	3000
GD30AD3344AMTR-I	2.2~5.5	NA	4 SE, 2 Diff	16	1	+/-0.064~+/-6.144	NA	NA	+/-8ppm/FS	0.9	SPI	-40°C ~125°C	MSOP10	3000
GD30AD3640AMTR-I	2.7~5.5	NA	4 SE, 2 Diff	24	1	+/-0.064~+/-6.144	NA	NA	+/-8ppm/FS	0.9	I ² C	-40°C ~125°C	MSOP10	3000
GD30AD3641AMTR-I	2.7~5.5	NA	4 SE, 2 Diff	24	1	+/-0.064~+/-6.144	NA	NA	+/-8ppm/FS	0.9	SPI	-40°C ~125°C	MSOP10	3000

GD30AP General Operation Amp Selection Guide

Part No.	Supply Voltage Range Vs (V)	Channel	Gain BW (MHz)	Slew Rate (V/μs)	Power Consumption, mA/Ch	Input Offset, Max, mV	Input Offset Drift, Max, μV/degC	Noise, 0.1Hz~10Hz (μV-pp)	Noise Floor @1kHz (nV/sqrtHz)	Input Bias (pA) Typical	PSRR (dB) Typical	VCM (V)	CMRR (dB) Typical	Open Loop Gain, Avol (dB) Typical	RRI	RRO	Temperature Operating Range (°C)	Package	MOQ (PCS)
GD30AP321NNSTR-I01	1.8~5.5 +/-0.9 ~ +/-2.75	1	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40°C ~125°C	SOT23-5L	3000
GD30AP321NNDTR-I01	1.8~5.5 +/-0.9 ~ +/-2.75	1	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40°C ~125°C	SC70-5L	3000
GD30AP358NWLTR-I02	1.8~5.5 +/-0.9 ~ +/-2.75	2	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40°C ~125°C	SOIC-8L	4000
GD30AP358NWETr-I02	1.8~5.5 +/-0.9 ~ +/-2.75	2	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40°C ~125°C	DFN2x2-8L	3000
GD30AP358NWMTR-I02	1.8~5.5 +/-0.9 ~ +/-2.75	2	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40°C ~125°C	MSOP-8L	3000
GD30AP324NZLTR-I04	1.8~5.5 +/-0.9 ~ +/-2.75	4	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40°C ~125°C	SOIC-14L	2500
GD30AP324NZPTR-I04	1.8~5.5 +/-0.9 ~ +/-2.75	4	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40°C ~125°C	TSSOP-14L	3000
GD30AP324NLUTR-I04	1.8~5.5 +/-0.9 ~ +/-2.75	4	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40°C ~125°C	QFN3x3-16L	3000
GD30AP721ANSTR-I01	1.8~5.5 +/-0.9 ~ +/-2.75	1	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	SOT23-5L	3000
GD30AP721AWLTR-I01	1.8~5.5 +/-0.9 ~ +/-2.75	1	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	SOIC-8L	4000

Signal Chain

GD30AP General Operation Amp Selection Guide

Part No.	Supply Voltage Range Vs (V)	Channel	Gain BW (MHz)	Slew Rate (V/μs)	Power Consumption, mA/Ch	Input Offset, Max, mV	Input Offset Drift, Max, μV/degC	Noise, 0.1Hz~10Hz (μV-pp)	Noise Floor @1kHz (nV/sqrtHz)	Input Bias (pA) Typical	PSRR (dB) Typical	VCM (V)	CMRR (dB) Typical	Open Loop Gain, Avol (dB) Typical	RRI	RRO	Temperature Operating Range (°C)	Package	MOQ (PCS)
GD30AP723ANSTR-I01	1.8~5.5 +/-0.9 ~ +/-2.75	1	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	SOT23-5L	3000
GD30AP723ANDTR-I01	1.8~5.5 +/-0.9 ~ +/-2.75	1	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	SC70-5L	3000
GD30AP722AWETR-I02	1.8~5.5 +/-0.9 ~ +/-2.75	2	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	DFN2x2-8L	3000
GD30AP722AWLTR-I02	1.8~5.5 +/-0.9 ~ +/-2.75	2	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	SOIC-8L	4000
GD30AP722AWMTR-I02	1.8~5.5 +/-0.9 ~ +/-2.75	2	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	MSOP-8L	3000
GD30AP722AWSTR-I02	1.8~5.5 +/-0.9 ~ +/-2.75	2	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	SOT23-8L	3000
GD30AP722AWPTR-I02	1.8~5.5 +/-0.9 ~ +/-2.75	2	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	TSSOP-8L	4000
GD30AP724AZLTR-I04	1.8~5.5 +/-0.9 ~ +/-2.75	4	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	SOIC-14L	2500
GD30AP724AZPTR-I04	1.8~5.5 +/-0.9 ~ +/-2.75	4	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40°C ~125°C	TSSOP-14L	3000
GD30AP8551NSTR-I01	1.8~5.5	1	1.5	1.2	0.125	+/-0.008	+/-0.04	0.45	19	+/-70	126	Vsm-0.1~Vsp+0.1	130	132	•	•	-40°C ~125°C	SOT23-5L	3000
GD30AP8551WLTR-I01	1.8~5.5	1	1.5	1.2	0.125	+/-0.008	+/-0.04	0.45	19	+/-70	126	Vsm-0.1~Vsp+0.1	130	132	•	•	-40°C ~125°C	SOIC-8L	4000
GD30AP8552WETR-I02	1.8~5.5	2	1.5	1.2	0.125	+/-0.008	+/-0.04	0.45	19	+/-70	126	Vsm-0.1~Vsp+0.1	130	132	•	•	-40°C ~125°C	DFN2x2-8L	3000
GD30AP8552WLTR-I02	1.8~5.5	2	1.5	1.2	0.125	+/-0.008	+/-0.04	0.45	19	+/-70	126	Vsm-0.1~Vsp+0.1	130	132	•	•	-40°C ~125°C	SOIC-8L	4000
GD30AP8552WMTR-I02	1.8~5.5	2	1.5	1.2	0.125	+/-0.008	+/-0.04	0.45	19	+/-70	126	Vsm-0.1~Vsp+0.1	130	132	•	•	-40°C ~125°C	MSOP-8L	3000
GD30AP8553NSTR-I01	1.8~5.5	1	1.5	1.2	0.125	+/-0.008	+/-0.04	0.45	19	+/-70	126	Vsm-0.1~Vsp+0.1	130	132	•	•	-40°C ~125°C	SOT23-5L	3000
GD30AP8553NDTR-I01	1.8~5.5	1	1.5	1.2	0.125	+/-0.008	+/-0.04	0.45	19	+/-70	126	Vsm-0.1~Vsp+0.1	130	132	•	•	-40°C ~125°C	SC70-5L	3000
GD30AP8631NSTR-I01	2.3~5.5 +/-1.15 ~ +/-2.75	1	9	8.5	0.7	+/-3.5	+/-2	4.2	13	1	106	Vsm-0.1~Vsp+0.1	82	102	•	•	-40°C ~125°C	SOT23-5L	3000
GD30AP8632WLTR-I02	2.3~5.5 +/-1.15 ~ +/-2.75	2	9	8.5	0.7	+/-3.5	+/-2	4.2	13	1	106	Vsm-0.1~Vsp+0.1	82	102	•	•	-40°C ~125°C	SOIC-8L	4000
GD30AP8632WETR-I02	2.3~5.5 +/-1.15 ~ +/-2.75	2	9	8.5	0.7	+/-3.5	+/-2	4.2	13	1	106	Vsm-0.1~Vsp+0.1	82	102	•	•	-40°C ~125°C	DFN2x2-8L	3000
GD30AP8632WMTR-I02	2.3~5.5 +/-1.15 ~ +/-2.75	2	9	8.5	0.7	+/-3.5	+/-2	4.2	13	1	106	Vsm-0.1~Vsp+0.1	82	102	•	•	-40°C ~125°C	MSOP-8L	3000
GD30AP8634ZLTR-I04	2.3~5.5 +/-1.15 ~ +/-2.75	4	9	8.5	0.7	+/-3.5	+/-2	4.2	13	1	106	Vsm-0.1~Vsp+0.1	82	102	•	•	-40°C ~125°C	SOIC-14L	2000

Signal Chain

GD30CP Comparator Selection Guide

Part No.	Supply Voltage Range Vs (V)		Channel	Output Type	Input Hysteresis (mV)	Propogation Delay (ns) 100mV Overdrive, High to Low	Propogation Delay (ns) 100mV Overdrive, Low to High	Power Consumption, mA/Ch	Input Offset, Max, mV	Input Offset Drift, Max, μ V/degC	VCM (V)		CMRR (dB) Vs-5.5V	Temperature Operating Range (°C)	Package	MOQ (PCS)
	Min	Max									Min	Max				
GD30CP331ANSTR-I	1.8	5.5	1	Open drain	3	100	150	0.06	+/-5	+/-2	Vsm-0.1	Vsp+0.1	58	-40°C ~85°C	SOT23-5L	3000
GD30CP331ANDTR-I	1.8	5.5	1	Open drain	3	100	150	0.06	+/-5	+/-2	Vsm-0.1	Vsp+0.1	58	-40°C ~85°C	SC70-5L	3000
GD30CP331ANSTR-S	1.8	5.5	1	Open drain	3	100	150	0.06	+/-5	+/-2	Vsm-0.1	Vsp+0.1	58	-40°C ~85°C	SOT23-5L	3000
GD30CP393AWLTR-I	1.8	5.5	2	Open drain	3	100	150	0.06	+/-5	+/-2	Vsm-0.1	Vsp+0.1	58	-40°C ~85°C	SOIC-8L	4000
GD30CP393AWMTR-I	1.8	5.5	2	Open drain	3	100	150	0.06	+/-5	+/-2	Vsm-0.1	Vsp+0.1	58	-40°C ~85°C	MSOP-8L	3000
GD30CP393AWPTR-I	1.8	5.5	2	Open drain	3	100	150	0.06	+/-5	+/-2	Vsm-0.1	Vsp+0.1	58	-40°C ~85°C	TSSOP-8L	3000
GD30CP393AWETR-I	1.8	5.5	2	Open drain	3	100	150	0.06	+/-5	+/-2	Vsm-0.1	Vsp+0.1	58	-40°C ~85°C	DFN2x2-8L	3000
GD30CP8721NSTR-I	1.7	5.5	1	Push pull	3	66	78	0.046	+/-4	+/-1	Vsm-0.1	Vsp+0.1	55	-40°C ~85°C	SOT23-5L	3000
GD30CP8721NDTR-I	1.7	5.5	1	Push pull	3	66	78	0.046	+/-4	+/-1	Vsm-0.1	Vsp+0.1	55	-40°C ~85°C	SC70-5L	3000
GD30CP8722WETR-I	1.7	5.5	2	Push pull	3	66	78	0.046	+/-4	+/-1	Vsm-0.1	Vsp+0.1	55	-40°C ~85°C	DFN2x2-8L	3000
GD30CP8722WLTR-I	1.7	5.5	2	Push pull	3	66	78	0.046	+/-4	+/-1	Vsm-0.1	Vsp+0.1	55	-40°C ~85°C	SOIC-8L	4000
GD30CP8722WMTR-I	1.7	5.5	2	Push pull	3	66	78	0.046	+/-4	+/-1	Vsm-0.1	Vsp+0.1	55	-40°C ~85°C	MSOP-8	3000
GD30CP8723NSTR-I	1.7	5.5	1	Push pull	3	66	78	0.046	+/-4	+/-1	Vsm-0.1	Vsp+0.1	55	-40°C ~85°C	SOT23-5L	3000
GD30CP8723NSTR-S	1.7	5.5	1	Push pull	3	66	78	0.046	+/-4	+/-1	Vsm-0.1	Vsp+0.1	55	-40°C ~85°C	SOT23-5L	3000

GD30TS Temp Sensor Selection Guide

Part No.	Type	Power Supply (V)	No. of Local/ Remote Channel	Accuracy, Max Error (°C)	Interface	Temperature Operating Range (°C)	Address	Package	MOQ (PCS)
GD30TS002TWYTR-I	T-Sensor	2.2~5.5	1 * Local	+/-0.1@35~45°C +/-0.3@0~90°C	I ² C	-40°C ~125°C	ADDR pin selected	WLCSP-8	3000
GD30TS003TWETR-I	T-Sensor	2.4~5.5	1 * Local	+/-0.1@35~45°C +/-0.3@0~90°C	I ² C	-40°C ~125°C	ADDR pin selected	DFN-8	2000
GD30TS004TSET7-I	T-Sensor	1.6~5.5	1 * Local	+/-0.1@35~45°C +/-0.3@0~90°C	I ² C	-40°C ~125°C	Fixed	DFN-6	2500
GD30TS004TSETD-I	T-Sensor	1.6~5.5	1 * Local	+/-0.1@35~45°C +/-0.3@0~90°C	I ² C	-40°C ~125°C	Fixed	DFN-6	10000
GD30TS310TJVTY-I	T-Sensor	1.6~5.5	1 * Local	+/-0.1@30~45°C +/-0.3@-10~60°C +/-0.5@-40~125°C	I ² C	-55°C ~150°C	x=0~7	MCLGA-4	490
GD30TS310TJYTR-I	T-Sensor	1.6~5.5	1 * Local	+/-0.1@30~45°C +/-0.3@-10~60°C +/-0.5@-40~125°C	I ² C	-55°C ~150°C	x=0~7	WLCSP-4	3000
GD30TS310TSETR-I	T-Sensor	1.6~5.5	1 * Local	+/-0.1@30~45°C +/-0.3@-10~60°C +/-0.5@-40~125°C	I ² C	-55°C ~150°C	x=0~7	DFN-6	4000

Signal Chain

GD30TS Temp Sensor Selection Guide

Part No.	Type	Power Supply (V)	No. of Local/ Remote Channel	Accuracy, Max Error (°C)	Interface	Temperature Operating Range (°C)	Address	Package	MOQ (PCS)
GD30TS100NSSTR-I	T-Sensor	2.7~5.5	1 * Local	+/-0.5@0~65°C +/-1@-40~125°C	I²C	-55°C ~125°C	ADD0 ADD1 pin seleccted	SOT23-6	3000
GD30TS101NSSTR-I	T-Sensor	2.7~5.5	1 * Local	+/-0.5@0~65°C +/-1@-40~125°C	I²C	-55°C ~125°C	ADD0 pin seleccted	SOT23-6	3000
GD30TS075CWGTR-I	T-Sensor	1.4~5.5	1 * Local	+/-0.6@-25~55°C +/-1@-55~125°C	I²C	-55°C ~125°C	A0,A1,A2 pin selected	SOP-8	4000
GD30TS075CWMTR-I	T-Sensor	1.4~5.5	1 * Local	+/-0.6@-25~55°C +/-1@-55~125°C	I²C	-55°C ~125°C	A0,A1,A3 pin selected	MSOP-8	4000
GD30TS075CWETR-I	T-Sensor	1.4~5.5	1 * Local	+/-0.6@-25~55°C +/-1@-55~125°C	I²C	-55°C ~125°C	A0,A1,A4 pin selected	DFN-8	4000
GD30TS112NSOTR-I	T-Sensor	1.4~5.5	1 * Local	+/-0.5@0~65°C +/-1@-40~125°C	I²C	-55°C ~150°C	ADD0 pin selected	SOT563-6	4000
GD30TS112NSETR-I	T-Sensor	1.4~5.5	1 * Local	+/-0.5@0~65°C +/-1@-40~125°C	I²C	-55°C ~150°C	ADD0 pin selected	DFNWB-6	3000
GD30TS103NJYTR-I	T-Sensor	1.4~2.8	1 * Local	+/-2@-10~100°C +/-3@-40~125°C	I²C	-40°C ~125°C	x=A~H	WLCSP-4	4000
GD30TS103SJYTR-I	T-Sensor	1.4~3.6	1 * Local	+/-2@-10~100°C +/-3@-40~125°C	I²C	-40°C ~125°C	x=A~P	WLCSP-4	4000
GD30TS139NSYTR-I	T-Sensor	VDD: 1.7~1.98 VIO: 0.95~1.05	1 * Local	1@75~95°C 3@-40~125°C	I²C, I³C	-40°C ~125°C	SA pin selected	WLCSP-9	4000
GD30TS304TLUTR-I	T-Sensor	VDD: 2.7~5.5 VIO: 1.6~5.5	1 * Local 4 * remote	Local: +/-1@-40~125°C Remote: +/-1.5@-40~125°C	I²C	-40°C ~125°C	ADD pin selected	QFN-16	3000
GD30TS308TLUTR-I	T-Sensor	VDD: 2.7~5.5 VIO: 1.6~5.5	1 * Local 8 * remote	Local: +/-1@-40~125°C Remote: +/-1.5@-40~125°C	I²C	-40°C ~125°C	ADD pin selected	VQFN-16	3000
GD30TS451NWJTR-I	T-Sensor	1.7~5.5	1 * Local 1 * remote	Local: +/-2@-40~125°C Remote: +/-4@-50~150°C	I²C	-55°C ~150°C	Fixed	WSON-8	4000
GD30TS110TJYTR-I	T-Sensor	1.6~5.5	1 * Local	+/-0.1@30~45°C +/-0.5@-40~125°C	Single	-40°C ~125°C	NA	WLCSP-4	3000
GD30TS110TJVTY-I	T-Sensor	1.6~5.5	1 * Local	+/-0.1@30~45°C +/-0.5@-40~125°C	Single	-40°C ~125°C	NA	MCLGA-4	490
GD30TS110TSETR-I	T-Sensor	1.6~5.5	1 * Local	+/-0.1@30~45°C +/-0.5@-40~125°C	Single	-40°C ~125°C	NA	DFN-6	4000
GD30TS110TBNBU-I	T-Sensor	1.6~5.5	1 * Local	+/-0.1@30~45°C +/-0.5@-40~125°C	Single	-40°C ~125°C	NA	TO-92S	2000
GD30TS0011UETR-I	T-Sensor	1.4~5.5	1 * Local	+/-0.6@-25~55°C +/-1@-40~125°C	Pulse	-55°C ~150°C	NA	DFN-2	4000
GD30TS0011BNBU-I	T-Sensor	1.4~5.5	1 * Local	+/-0.6@-25~55°C +/-1@-40~125°C	Pulse	-55°C ~150°C	NA	TO-92S	2000
GD30TS0011UNBU-I	T-Sensor	1.4~5.5	1 * Local	+/-0.6@-25~55°C +/-1@-40~125°C	Pulse	-55°C ~150°C	NA	TO-92S-2	2000
GD30TS084TNSTR-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	SOT23-5	3000
GD30TS084TB9BU-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	TO-92	2000
GD30TS084TBNBU-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	TO-92S	2000

Signal Chain

GD30TS Temp Sensor Selection Guide

Part No.	Type	Power Supply (V)	No. of Local/ Remote Channel	Accuracy, Max Error (°C)	Interface	Temperature Operating Range (°C)	Address	Package	MOQ (PCS)
GD30TS085TNSTR-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	SOT23-5	3000
GD30TS085TB9BU-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	TO-92	2000
GD30TS085TBNBU-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	TO-92S	2000
GD30TS086TNSTR-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	SOT23-5	3000
GD30TS086TB9BU-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	TO-92	2000
GD30TS086TBNBU-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	TO-92S	2000
GD30TS087TNSTR-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	SOT23-5	3000
GD30TS087TB9BU-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	TO-92	2000
GD30TS087TBNBU-I	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125°C	Analog output	-55°C ~125°C	NA	TO-92S	2000
GD30TS036NNSTR-I	T-Sensor	2.7~5.5	1 * Local	+/-3@-40~125°C	Analog output	-40°C ~125°C	NA	SOT23-5	3000
GD30TS036NBSTR-I	T-Sensor	2.7~5.5	1 * Local	+/-3@-40~125°C	Analog output	-40°C ~125°C	NA	SOT23-3	3000
GD30TS036NWGTR-I	T-Sensor	2.7~5.5	1 * Local	+/-3@-40~125°C	Analog output	-40°C ~125°C	NA	SOIC-8	4000
GD30TS036NB9BU-I	T-Sensor	2.7~5.5	1 * Local	+/-3@-40~125°C	Analog output	-40°C ~125°C	NA	TO-92	2000
GD30TS708NNSTR-I	T-switch	2.7~5.5	1 * Local	+/-3@-60~100°C	NA	0°C ~125°C	NA	SOT23-5	3000
GD30TS708NSETR-I	T-switch	2.7~5.5	1 * Local	+/-3@-60~100°C	NA	0°C ~125°C	NA	DFN-6	4000
GD30TS709NNSTR-I	T-switch	2.7~5.5	1 * Local	+/-3@-60~100°C	NA	0°C ~125°C	NA	SOT23-5	3000
GD30TS709NSETR-I	T-switch	2.7~5.5	1 * Local	+/-3@-60~100°C	NA	0°C ~125°C	NA	DFN-6	4000
GD30TSHT30WETR-I	T-Sensor H-Seneor	2.2~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.5@-40~90°C H: +/-3%@10%~90%RH	I ² C	-40°C ~130°C	ADDR pin selected	DFN-8	2000
GD30TSHT30WETC-I	T-Sensor H-Seneor	2.2~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.5@-40~90°C H: +/-3%@10%~90%RH	I ² C	-40°C ~130°C	ADDR pin selected	DFN-8	2000
GD30TSHT30WETF-I	T-Sensor H-Seneor	2.2~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.5@-40~90°C H: +/-3%@10%~90%RH	I ² C	-40°C ~130°C	ADDR pin selected	DFN-8	2000
GD30TSHTC3WETR-I	T-Sensor H-Seneor	1.6~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.3@0~60°C H: +/-3%@20%~80%RH	I ² C	-40°C ~130°C	Fixed	DFN-6	2000
GD30TSHTC3WETC-I	T-Sensor H-Seneor	1.6~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.3@0~60°C H: +/-3%@20%~80%RH	I ² C	-40°C ~130°C	Fixed	DFN-6	2000
GD30TSHTC3WETF-I	T-Sensor H-Seneor	1.6~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.3@0~60°C H: +/-3%@20%~80%RH	I ² C	-40°C ~130°C	Fixed	DFN-6	2000

Capacitive Touchscreen Controller

Capacitive Touchscreen Controller Features

- Outstanding anti RF, LCD and power supply interference
- Detect up to 10 touch points simultaneously
- Panel thickness: glass up to 2.5mm, plastic up to 1.2mm
- I²C compatible slave mode 400KHz
- I/O interface: support 1.8V /3.3V

Capacitive Touchscreen Controller Selection Guide

Part No.	Voltage(V)	Channels	Communication	Touch Points	Screen Size(Inch)	Package	Package Size(mm)
GSM3765	2.7~3.6V	24TX/12RX	I ² C/SPI/HID over I ² C	5~10 Point	3~7	QFN48	6x6x0.55
GSM3766	2.7~3.6V	26TX/14RX	I ² C/SPI/HID over I ² C	5~10 Point	7~10.1	QFN52	6x6x0.55
GSL3775	2.7~3.6V	24TX/12RX	I ² C/SPI	5~10 Point	3~7	QFN48	6x6x0.55
GSL3776	2.7~3.6V	26TX/14RX	I ² C/SPI	5~10 Point	7~10.1	QFN52	6x6x0.55
GSL1680	2.6~3.3V	16TX/10RX	I ² C	5~10 Point	7	QFN40	5x5x0.8
GSL1686	2.6~3.3V	16TX/10RX	I ² C	5~10 Point	7	QFN40	5x5x0.8
GSL1691	2.6~3.3V	18TX/12RX	I ² C	5~10 Point	3~7	QFN40	5x5x0.8
GSL2681	2.6~3.3V	23TX/12RX	I ² C	5~10 Point	3~8	QFN48	6x6x0.8
GSL3670	2.6~3.3V	26TX/14RX	I ² C	5~10 Point	7~10.1	QFN52	6x6x0.8
GSL3676	2.6~3.3V	28TX/18RX	I ² C	5~10 Point	9~10.1	QFN56	7x7x0.8
GSL3680	2.6~3.3V	31TX/20RX	I ² C	5~10 Point	9~10.1	QFN68	8x8x0.8
GSL3692	2.6~3.3V	32TX/24RX	I ² C	5~10 Point	9.7~13.5	QFN68	8x8x0.8
GSL5680	2.6~3.3V	42TX/30RX	I ² C	5~10 Point	9.7~15.6	QFN88	10x10x0.8
GSL915	2.6~3.3V	26TX/14RX	I ² C	5~10 Point	7~10.1	QFN52	6x6x0.8
GSL2338	2.6~3.3V	40RX	I ² C	2 Point	5.5	QFN48	5x5x0.5

Fingerprint Sensor

Capacitive Fingerprint Sensor

Capacitive Fingerprint Sensor Features

- Sensor shapes: round/square/rectangular etc
- Application scenarios: front/back/side of smartphones, tablets and laptops
- Surface materials: matte/glossy/ceramic cover/glass cover etc
- High sensitivity, high SNR, high quality image
- Image accuracy: 8-bit precision and 256 gray levels.
- Support standard SPI interface
- Resolution: 508 DPI
- Adaptive calibration: automatically adjust configuration according to different fingerprints
- Recognition algorithm: support many kinds of algorithm includes finger pattern and feature points
- High-definition fingerprint images can be obtained without a metal ring
- FRR < 2% @ FAR 1/50000
- Supply voltage: 2.8V ~ 3.6V
- VDDIO voltage: 1.8V ~ AVDD
- Power consumption:
Image scan mode (frame rate > 20 F/s or customized): 8.5 mA (configurable)
Sleep mode: 100 μ A (typically)
Deep sleep mode: 30 ~ 100 μ A
- ESD performance:
Air discharge: $\pm$ 15.0 kV
Direct discharge: $\pm$ 8.0 kV
- Latch-up performance: $\pm$ 400.0 mA

Capacitive Fingerprint Sensor Selection Guide

Part No.	Type	Typical Application	Size(mm)	Sensing Size(mm)	Pixel Array
GSL6157	LGA	Mobile/Tablet/PC	14.3x2.4~15.5x3.6	8x1.8	160x36
GSL6159	LGA	Mobile/Tablet/PC	13.5x2.1~14.7x3.3	8x1.6	160x32
GSL6192	LGA	Mobile/Tablet	13.5x1.8~15.5x2.8	7.8x1.3	180x30
GSL6193	LGA	Mobile/Tablet	12.2x2.1~14.3x2.4	5.9x1.6	118x32
GSL6195	LGA	Mobile/Tablet	12.2x1.8~13.5x2.1	5.9x1.3	118x26
GSL6135	LGA	Mobile/IoT	8x8~10.5x10.5 / ϕ 8.9~ ϕ 10.5	3.2x3.2	64x64
GSL6182GS1	LGA	Smart door lock	12.5x12.5~15x15 / ϕ 12.5~ ϕ 15	6.6x5.7	128x112
GSL6186C	LGA	PC/IoT	10.5x10.5~12x12 / ϕ 10.5~ ϕ 12	4.0x3.2	80x64
GSL6150	LGA	PC/IoT	8.5x4~12x12 / ϕ 8.9~ ϕ 12	4.0x3.2	80x64
GDM50	Module	IoT	15.6x15.0 / ϕ 16.9	4.0x3.2	80x64
GDM82	Module	IoT	ϕ 21	8x8	160x160

Optical Fingerprint Sensor

Optical Fingerprint Sensor Features

- Support both rigid and flexible OLED
- Support minimum transmission rate of 1.5%
- FRR 1.5% @ FAR 1/50,000
- Support minimum of 12 Enroll times
- reconized from 360 degrees
- Large size pixel design for low-light under display fingerprint application
- Advanced single-chip architecture
- Customized lens design and pixel combination are adopted to obtain high-definition fingerprint images.
- No flash supported

Optical Fingerprint Sensor Selection Guide

Part No.	Type	Finger Touch Size(mm)	Typical Application	Sensing Size(mm)	Pixel Array
GSL7001A	KGD	6.0x6.0	Mobile/IoT	2.0x2.0	250x250
GSL7002	KGD	7.5x6.8	Mobile	1.5x1.35	200x180
GSL7003	KGD	7.5x6.8	Mobile	1.5x1.35	200x180
GDM72	Module	7.5x6.8	IoT	1.5x1.35	200x180

Air Pressure Sensor



Air Pressure Sensor Feature

- Based on the MEMS resistive pressure sensing architecture.
- Covering applications for both common and waterproof products.
- Supporting a waterproof rating of 10 atm.
- Supporting a detection range from 300 hPa to 1250 hPa.
- With an absolute accuracy of ± 0.5 hPa and a relative accuracy of ± 0.06 hPa.
- Ultra-low power consumption.

Air Pressure Sensor Selection Guide

Part No.	Application	Power Supply	Operation Ranges	ADC	Interface	Absolute Pressure Accuracy	Sample Rate	Package Size(mm)
GDY1121	Digital Barometric Pressure Sensor	1.8~3.3V	300~1250hPa	24-bit	I ² C/SPI	± 0.5 hPa(Typ)	1Hz ~250Hz	2x2x0.85
GDY1122	Digital Waterproof Barometric Pressure Sensor(10atm)	1.8~3.3V	300~1250hPa	24-bit	I ² C/SPI	± 0.5 hPa(Typ)	1Hz ~250Hz	2.7x2.7x1.7
GDY1124	Digital Waterproof Barometric Pressure Sensor(5atm)	1.8~3.3V	300~1100 hPa	24-bit	I ² C/SPI	± 0.5 hPa(Typ)	1Hz ~250Hz	2.7x2.7x1.7