



GD32E5 series of 32-bit ARM[®] Cortex[®]-M33 MCUs Selection Guide (Aug/2020)

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity										EX MC	Analog Interface		Package	
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I ² C	SPI	USB 2.0	I ² S	SDIO	Ether-net	TMU	SHR TM	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	FS	2				•				3(10)	2	LQFP48
	GD32E503CET6	180	512K	128K	up to 37	1	9	1	2	1	2	1	3+0	3	3	FS	2				•				3(10)	2	LQFP48
	GD32E503RCT6	180	256K	96K	up to 51	1	3	2	2	1	2	1	3+3	3	3	FS	2	1			•				3(16)	2	LQFP64
	GD32E503RET6	180	512K	128K	up to 51	1	9	2	2	1	2	1	3+3	3	3	FS	2	1			•				3(16)	2	LQFP64
	GD32E503VCT6	180	256K	96K	up to 80	1	3	2	2	1	2	1	3+3	3	3	FS	2	1			•		•		3(16)	2	LQFP100
	GD32E503VET6	180	512K	128K	up to 80	1	9	2	2	1	2	1	3+3	3	3	FS	2	1			•		•		3(16)	2	LQFP100
	GD32E503ZCT6	180	256K	96K	up to 112	1	3	2	2	1	2	1	3+3	3	3	FS	2	1			•		•		3(21)	2	LQFP144
	GD32E503ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	3+3	3	3	FS	2	1			•		•		3(21)	2	LQFP144
GD32E505	GD32E505RBT6	180	128K	80K	up to 51	1	3	1	2	1	2	1	3+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	3+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	3+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	3+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	3+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	3+3	3	3	HS OTG	2			•	•	3	•		2(21)	2	LQFP144
	GD32E505ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	3+3	3	3	HS OTG	2			•	•	3	•		2(21)	2	LQFP144
GD32E507	GD32E507RCT6	180	256K	96K	up to 51	1	3	1	2	1	2	1	3+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	3+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	3+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	3+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	3+3	3	3	HS OTG	2		•	•	•	3	•		2(21)	2	LQFP144
	GD32E507ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	3+3	3	3	HS OTG	2		•	•	•	3	•		2(21)	2	LQFP144
GD32 EPRT	GD32EPRTD6	180	384K	96K+4MB PSRAM	up to 51	1	3	2	2	1	2	1	3+3	3	3	FS	2		•						3(16)	2	LQFP64
	GD32EPRTVDT6	180	384K	96K+4MB PSRAM	up to 80	1	3	2	2	1	2	1	3+3	3	3	FS	2		•						3(16)	2	LQFP100



GD32V series of 32-bit RISC-V MCUs Selection Guide (Aug/2019)

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	USART +UART	I ² C	SPI	CAN 2.0B	USB 2.0 FS	I ² S	SDIO		Ether-net	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



GD32E23x series of 32-bit ARM[®] Cortex[®]-M23 MCUs Selection Guide (Jan/2020)

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	USART	I ² C	SPI	USB 2.0 FS	I ² S	Comp	OP-AMP	12bit ADC Units (CHs)		12bit DAC Units
GD32E230	GD32E230F4P6	72	16K	4K	up to 15		4	1	1	1	2	1	1	1	1		1	1		1(9)		TSSOP20
	GD32E230F6P6	72	32K	6K	up to 15		4	1	1	1	2	1	2	1	1		1	1		1(9)		TSSOP20
	GD32E230F8P6	72	64K	8K	up to 15		4	1	1	1	2	1	2	2	2		1	1		1(9)		TSSOP20
	GD32E230F4V6	72	16K	4K	up to 15		4	1	1	1	2	1	1	1	1		1	1		1(9)		LGA20
	GD32E230F6V6	72	32K	6K	up to 15		4	1	1	1	2	1	2	1	1		1	1		1(9)		LGA20
	GD32E230F8V6	72	64K	8K	up to 15		4	1	1	1	2	1	2	2	2		1	1		1(9)		LGA20
	GD32E230G4U6	72	16K	4K	up to 23		4	1	1	1	2	1	1	1	1		1	1		1(10)		QFN28
	GD32E230G6U6	72	32K	6K	up to 23		4	1	1	1	2	1	2	1	1		1	1		1(10)		QFN28
	GD32E230G8U6	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	
GD32E231	GD32E231C4T6	72	16K	4K	up to 39		4	1	1	1	2	1	1	1	1		1	1	2	1(10)		LQFP48
	GD32E231C6T6	72	32K	6K	up to 39		4	1	1	1	2	1	2	1	1		1	1	2	1(10)		LQFP48
	GD32E231C8T6	72	64K	8K	up to 39		5	1	1	1	2	1	2	2	2		1	1	2	1(10)		LQFP48
GD32E232	GD32E232E4U7	72	16K	4K	up to 18	1	4	1	2	1	2	1	2	2	1		1			1(13)	4	QFN24
	GD32E232E6U7	72	32K	6K	up to 18	1	4	1	2	1	2	1	2	2	1		1			1(13)	4	QFN24
	GD32E232E8U7	72	64K	8K	up to 18	1	5	1	2	1	2	1	2	2	2		1			1(13)	4	QFN24
	GD32E232K4Q7	72	16K	4K	up to 28	1	4	1	2	1	2	1	2	2	1		1			1(16)	4	QFN32
	GD32E232K6Q7	72	32K	6K	up to 28	1	4	1	2	1	2	1	2	2	1		1			1(16)	4	QFN32
	GD32E232K8Q7	72	64K	8K	up to 28	1	5	1	2	1	2	1	2	2	2		1			1(16)	4	QFN32



GD32E1 series of 32-bit ARM[®] Cortex[®]-M4F MCUs 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	USART +UART	I ² C	SPI	CAN 2.0B	USB 2.0 FS	I ² S	SDIO		Ether-net	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



GD32F3 series of 32-bit ARM[®] Cortex[®]-M4 MCUs 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	USART +UART	I ² C	SPI	CAN 2.0B	USB 2.0 FS	I ² S	SDIO	Ether-net		12bit ADC Units (CHs)	12bit DAC Units		
GD32F303	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	
	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
	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
	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	
GD32F305	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(21)	2	LQFP144	
	GD32F305ZET6	120	512K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2		•		2(21)	2	LQFP144	
	GD32F305ZGT6	120	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	2	OTG	2		•		2(21)	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		



GD32F3 series of 32-bit ARM[®] Cortex[®]-M4 MCUs 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	USART +UART	I ² C	SPI	CAN 2.0B	USB 2.0 FS	I ² S	SDIO	Ether-net		12bit ADC Units (CHs)	12bit DAC Units	
GD32F307	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(21)	2	LQFP144
	GD32F307ZET6	120	512K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(21)	2	LQFP144
	GD32F307ZGT6	120	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(21)	2	LQFP144



GD32F3 series of 32-bit ARM® Cortex®-M4 MCUs 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	USART	I²C	SPI	USB 2.0 FS	I²S	CEC	Comp	12bit ADC Units (CHs)	12bit DAC Units	
GD32F330	GD32F330F4P6	84	16K	4K	up to 15	1	4	1		1	2	1	1	1	1					1(9)		TSSOP20
	GD32F330F6P6	84	32K	4K	up to 15	1	4	1		1	2	1	2	1	1					1(9)		TSSOP20
	GD32F330F8P6	84	64K	8K	up to 15	1	4	1		1	2	1	2	2	2					1(9)		TSSOP20
	GD32F330G4U6	84	16K	4K	up to 23	1	4	1		1	2	1	1	1	1					1(10)		QFN28
	GD32F330G6U6	84	32K	4K	up to 23	1	4	1		1	2	1	2	1	1					1(10)		QFN28
	GD32F330G8U6	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
	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	GD32F350G4U6	108	16K	4K	up to 24	1	5	1	1	1	2	1	1	1	1	OTG	1	1	2	1(10)	1	QFN28
	GD32F350G6U6	108	32K	6K	up to 24	1	5	1	1	1	2	1	2	1	1	OTG	1	1	2	1(10)	1	QFN28
	GD32F350G8U6	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



GD32F4 series of 32-bit ARM[®] Cortex[®]-M4F MCUs Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity										EXM C/SD RAM	Analog Interface		Package	
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Bsc TM (16bit)	WDG	RTC	USART +UART	I ² C	SPI	CAN 2.0B	USB OTG	I ² S	SDIO	LCD -TFT	Cam era	ETH MAC		IPA	12bit ADC Units (CHs)		12bit DAC Units
GD32F450	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
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
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



GD32F4 series of 32-bit ARM[®] Cortex[®]-M4F MCUs Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity										EXM C/SD RAM	Analog Interface		Package	
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Bsc TM (16bit)	WDG	RTC	USART +UART	I ² C	SPI	CAN 2.0B	USB OTG	I ² S	SDIO	LCD -TFT	Cam era	ETH MAC		IPA	12bit ADC Units (CHs)		12bit DAC Units
GD32F407	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
	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
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 81	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



GD32F2 series of 32-bit ARM[®] Cortex[®]-M3 MCUs Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity										EXM C/SD RAM	Analog Interface		Package				
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	Bsc TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I ² C	SPI	CAN 2.0B	USB 2.0 FS	I ² S	SDIO	LCD -TFT	Cam era	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			



GD32F1 series of 32-bit ARM[®] Cortex[®]-M3 MCUs 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	USART	I ² C	SPI	USB 2.0 FS	I ² S	CEC	12bit ADC Units (CHs)	12bit DAC Units	
GD32F130	GD32F130F4P6	48	16K	4K	up to 15	1	4	1		1	2	1	1	1	1				1(9)		TSSOP20
	GD32F130F6P6	48	32K	4K	up to 15	1	4	1		1	2	1	2	1	1				1(9)		TSSOP20
	GD32F130F8P6	48	64K	8K	up to 15	1	4	1		1	2	1	2	2	2				1(9)		TSSOP20
	GD32F130G4U6	48	16K	4K	up to 23	1	4	1		1	2	1	1	1	1				1(10)		QFN28
	GD32F130G6U6	48	32K	4K	up to 23	1	4	1		1	2	1	2	1	1				1(10)		QFN28
	GD32F130G8U6	48	64K	8K	up to 23	1	5	1		1	2	1	2	2	2				1(10)		QFN28
	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
	GD32F130K4T6	48	16K	4K	up to 25	1	4	1		1	2	1	1	1	1				1(10)		LQFP32
	GD32F130K6T6	48	32K	4K	up to 25	1	4	1		1	2	1	2	1	1				1(10)		LQFP32
	GD32F130K8T6	48	64K	8K	up to 25	1	5	1		1	2	1	2	2	2				1(10)		LQFP32
	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	GD32F150G4U6	72	16K	4K	up to 24	1	5	1	1	1	2	1	1	1	1	1	1	1	1(10)	1	QFN28
	GD32F150G6U6	72	32K	6K	up to 24	1	5	1	1	1	2	1	2	1	1	1	1	1	1(10)	1	QFN28
	GD32F150G8U6	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



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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	USART	I ² C	SPI	CAN 2.0B	I ² S	LCD	OP-amp	Comp	12bit ADC Units (CHs)		12bit DAC Units
GD32F170	GD32F170T4U6	48	16K	4K	up to 28	1	4	1		1	2	1	1	1	1	2					1(10)		QFN36
	GD32F170T6U6	48	32K	4K	up to 28	1	4	1		1	2	1	2	1	1	2					1(10)		QFN36
	GD32F170T8U6	48	64K	8K	up to 28	1	5	1		1	2	1	2	3	3	2					1(10)		QFN36
	GD32F170C4T6	48	16K	4K	up to 39	1	4	1		1	2	1	1	1	1	2					1(10)		LQFP48
	GD32F170C6T6	48	32K	4K	up to 39	1	4	1		1	2	1	2	1	1	2					1(10)		LQFP48
	GD32F170C8T6	48	64K	8K	up to 39	1	5	1		1	2	1	2	3	3	2					1(10)		LQFP48
	GD32F170R8T6	48	64K	8K	up to 55	1	5	1		1	2	1	2	3	3	2					1(16)		LQFP64
GD32F190	GD32F190T4U6	72	16K	4K	up to 28	1	5	1	1	1	2	1	1	1	2	1		2	2	1(10)	2	QFN36	
	GD32F190T6U6	72	32K	6K	up to 28	1	5	1	1	1	2	1	2	1	1	2	1		2	2	1(10)	2	QFN36
	GD32F190T8U6	72	64K	8K	up to 28	1	5	1	1	1	2	1	2	3	3	2	2		2	2	1(10)	2	QFN36
	GD32F190C4T6	72	16K	4K	up to 39	1	5	1	1	1	2	1	1	1	2	1	4x18	2	2	1(10)	2	LQFP48	
	GD32F190C6T6	72	32K	6K	up to 39	1	5	1	1	1	2	1	2	1	1	2	1	4x18	2	2	1(10)	2	LQFP48
	GD32F190C8T6	72	64K	8K	up to 39	1	5	1	1	1	2	1	2	3	3	2	2	4x18	2	2	1(10)	2	LQFP48
	GD32F190R4T6	72	16K	4K	up to 55	1	5	1	1	1	2	1	1	1	2	1	8x32	3	2	1(16)	2	LQFP64	
	GD32F190R6T6	72	32K	6K	up to 55	1	5	1	1	1	2	1	2	1	1	2	1	8x32	3	2	1(16)	2	LQFP64
	GD32F190R8T6	72	64K	8K	up to 55	1	5	1	1	1	2	1	2	3	3	2	2	8x32	3	2	1(16)	2	LQFP64



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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	USART (UART)	I ² C	SPI	CAN 2.0B	USB 2.0 FS	I ² S	SDIO		Ether-net	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



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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	USART (UART)	I ² C	SPI	CAN 2.0B	USB 2.0 FS	I ² S	SDIO		Ether-net	12bit ADC Units (CHs)		12bit DAC Units	
GD32F103	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	
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	10	1	2	1	2	1	5	2	3	2	OTG	2					2(16)	2	LQFP64
	GD32F105RGT6	108	1024K	96K	up to 51	10	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	10	1	2	1	2	1	5	2	3	2	OTG	2			•		2(16)	2	LQFP100
	GD32F105VGT6	108	1024K	96K	up to 80	10	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(21)	2	LQFP144
	GD32F105ZDT6	108	384K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2			•		2(21)	2	LQFP144
	GD32F105ZET6	108	512K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2			•		2(21)	2	LQFP144
	GD32F105ZFT6	108	768K	96K	up to 112	10	1	2	1	2	1	5	2	3	2	OTG	2			•		2(21)	2	LQFP144
	GD32F105ZGT6	108	1024K	96K	up to 112	10	1	2	1	2	1	5	2	3	2	OTG	2			•		2(21)	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
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



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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	USART (UART)	I ² C	SPI	CAN 2.0B	USB 2.0 FS	I ² S	SDIO	Ether-net		12bit ADC Units (CHs)	12bit DAC Units	
GD32F107	GD32F107RFT6	108	768K	96K	up to 51	10	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F107RGT6	108	1024K	96K	up to 51	10	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	10	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F107VGT6	108	1024K	96K	up to 80	10	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(21)	2	LQFP144
	GD32F107ZDT6	108	384K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(21)	2	LQFP144
	GD32F107ZET6	108	512K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(21)	2	LQFP144
	GD32F107ZFT6	108	768K	96K	up to 112	10	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(21)	2	LQFP144
	GD32F107ZGT6	108	1024K	96K	up to 112	10	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(21)	2	LQFP144
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



GD32F1 series of 32-bit ARM[®] Cortex[®]-M3 MCUs 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	USART (UART)	I ² C	SPI	CAN 2.0B	USB 2.0 FS	I ² S	SDIO		Ether-net	12bit ADC Units (CHs)		12bit DAC Units
GD32F101	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	