



# GD32H7 series of 32-bit ARM<sup>®</sup> Cortex<sup>®</sup>-M7 MCUs Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer								Connectivity										EXMC	Analog Interface			Package	
			Flash	SRAM		GPTM (16bit)	GPTM (32bit)	Advanced TM (16bit)	Basic TM (32bit)	Basic TM (64bit)	SysTick (24bit)	WDG	RTC	U(S)ART	I <sup>2</sup> C	SPI	CAN2.0B	I <sup>2</sup> S	USB HS OTG	COMP	SDIO	LCD-TFT	SAI		Ethernet	14bit ADC Units (CHs)	12bit ADC Units (CHs)		12bit DAC Units
GD32H737	GD32H737VGT6	600	1024K	1024K	up to 82	10	4	2	2	2	1	2	1	8	4	5	2	4	1	1	2		2	1	•	1(14), 1(12)	1(4)	1	LQFP100
	GD32H737VIT6	600	2048K	1024K	up to 82	10	4	2	2	2	1	2	1	8	4	5	3	4	1	1	2	1	2	1	•	1(14), 1(12)	1(4)	1	LQFP100
	GD32H737VMT6	600	3840K	1024K	up to 82	10	4	2	2	2	1	2	1	8	4	5	3	4	1	1	2	1	2	1	•	1(14), 1(12)	1(4)	1	LQFP100
	GD32H737ZGT6	600	1024K	1024K	up to 113	12	4	2	2	2	1	2	1	8	4	6	2	4	1	1	2		3	1	•	1(16), 1(14)	1(12)	1	LQFP144
	GD32H737ZIT6	600	2048K	1024K	up to 113	12	4	2	2	2	1	2	1	8	4	6	3	4	1	1	2	1	3	1	•	1(16), 1(14)	1(12)	1	LQFP144
	GD32H737ZMT6	600	3840K	1024K	up to 113	12	4	2	2	2	1	2	1	8	4	6	3	4	1	1	2	1	3	1	•	1(16), 1(14)	1(12)	1	LQFP144
	GD32H737IGT6	600	1024K	1024K	up to 121	12	4	2	2	2	1	2	1	8	4	6	2	4	2	1	2		3	1	•	1(16), 1(14)	1(12)	1	LQFP176
	GD32H737IIT6	600	2048K	1024K	up to 121	12	4	2	2	2	1	2	1	8	4	6	3	4	2	1	2	1	3	1	•	1(16), 1(14)	1(12)	1	LQFP176
	GD32H737IMT6	600	3840K	1024K	up to 121	12	4	2	2	2	1	2	1	8	4	6	3	4	2	1	2	1	3	1	•	1(16), 1(14)	1(12)	1	LQFP176
	GD32H737IGK6	600	1024K	1024K	up to 134	12	4	2	2	2	1	2	1	8	4	6	2	4	2	1	2		3	2	•	1(20), 1(18)	1(17)	1	BGA176
	GD32H737IIK6	600	2048K	1024K	up to 134	12	4	2	2	2	1	2	1	8	4	6	3	4	2	1	2	1	3	2	•	1(20), 1(18)	1(17)	1	BGA176
GD32H737IMK6	600	3840K	1024K	up to 134	12	4	2	2	2	1	2	1	8	4	6	3	4	2	1	2	1	3	2	•	1(20), 1(18)	1(17)	1	BGA176	
GD32H757	GD32H757VGT6	600	1024K	1024K	up to 82	10	4	2	2	2	1	2	1	8	4	5	3xFD	4	1	1	2	1	2	1	•	1(14), 1(12)	1(4)	1	LQFP100
	GD32H757VIT6	600	2048K	1024K	up to 82	10	4	2	2	2	1	2	1	8	4	5	3xFD	4	1	1	2	1	2	1	•	1(14), 1(12)	1(4)	1	LQFP100
	GD32H757VMT6	600	3840K	1024K	up to 82	10	4	2	2	2	1	2	1	8	4	5	3xFD	4	1	1	2	1	2	1	•	1(14), 1(12)	1(4)	1	LQFP100
	GD32H757VGJ6	600	1024K	1024K	up to 82	10	4	2	2	2	1	2	1	8	4	5	3xFD	4	1	1	2	1	2	1	•	1(14), 1(12)	1(4)	1	BGA100
	GD32H757VIJ6	600	2048K	1024K	up to 82	10	4	2	2	2	1	2	1	8	4	5	3xFD	4	1	1	2	1	2	1	•	1(14), 1(12)	1(4)	1	BGA100
	GD32H757VMJ6	600	3840K	1024K	up to 82	10	4	2	2	2	1	2	1	8	4	5	3xFD	4	1	1	2	1	2	1	•	1(14), 1(12)	1(4)	1	BGA100
	GD32H757ZGT6	600	1024K	1024K	up to 113	12	4	2	2	2	1	2	1	8	4	6	3xFD	4	1	1	2	1	3	1	•	1(16), 1(14)	1(12)	1	LQFP144
	GD32H757ZIT6	600	2048K	1024K	up to 113	12	4	2	2	2	1	2	1	8	4	6	3xFD	4	1	1	2	1	3	1	•	1(16), 1(14)	1(12)	1	LQFP144
GD32H757ZMT6	600	3840K	1024K	up to 113	12	4	2	2	2	1	2	1	8	4	6	3xFD	4	1	1	2	1	3	1	•	1(16), 1(14)	1(12)	1	LQFP144	
GD32H759	GD32H759IGT6	600	1024K	1024K	up to 121	12	4	2	2	2	1	2	1	8	4	6	3xFD	4	2	1	2	1	3	1	•	1(16), 1(14)	1(12)	1	LQFP176
	GD32H759IIT6	600	2048K	1024K	up to 121	12	4	2	2	2	1	2	1	8	4	6	3xFD	4	2	1	2	1	3	1	•	1(16), 1(14)	1(12)	1	LQFP176
	GD32H759IMT6	600	3840K	1024K	up to 121	12	4	2	2	2	1	2	1	8	4	6	3xFD	4	2	1	2	1	3	1	•	1(16), 1(14)	1(12)	1	LQFP176
	GD32H759IGK6	600	1024K	1024K	up to 134	12	4	2	2	2	1	2	1	8	4	6	3xFD	4	2	1	2	1	3	2	•	1(20), 1(18)	1(17)	1	BGA176
	GD32H759IIK6	600	2048K	1024K	up to 134	12	4	2	2	2	1	2	1	8	4	6	3xFD	4	2	1	2	1	3	2	•	1(20), 1(18)	1(17)	1	BGA176
	GD32H759IMK6	600	3840K	1024K	up to 134	12	4	2	2	2	1	2	1	8	4	6	3xFD	4	2	1	2	1	3	2	•	1(20), 1(18)	1(17)	1	BGA176



# GD32A503 series of 32-bit ARM<sup>®</sup> Cortex<sup>®</sup>-M33 MCUs Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)				I/O							Connectivity						Analog Interface		Package	
			Flash	SRAM	Data-Flash	EEPROM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART /LIN	I <sup>2</sup> C	SPI	CAN2.0B	I <sup>2</sup> S	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



# GD32W515 series of 32-bit ARM<sup>®</sup> Cortex<sup>®</sup>-M33 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 <sup>2</sup> C	SPI	USB 2.0 FS	I <sup>2</sup> S	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



# GD32L233 series of 32-bit ARM<sup>®</sup> Cortex<sup>®</sup>-M23 MCUs Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity							Analog Interface		Package	
			Flash	SRAM		LPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USAR +UART	LP UART	I <sup>2</sup> C	SPI	USB 2.0	I <sup>2</sup> S	Comp	Segment LCD	12bit ADC Units (CHs)		12bit DAC Units
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
	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



# GD32E5 series of 32-bit ARM® Cortex®-M33 MCUs 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	USART+UART	I²C	SPI	CAN 2.0B	USB 2.0	I²S	SDIO	Ether-net	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
GD32E PRT	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



# GD32E23x series of 32-bit ARM® Cortex®-M23 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 <sup>2</sup> C	SPI	USB 2.0 FS	I <sup>2</sup> S	Comp	OP-AMP	12bit ADC Units (CHs)	12bit DAC Units	
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
	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	
GD32E232	GD32E232E4U7TR	72	16K	4K	up to 18	1	4	1	2	1	2	1	2	2	1		1			1(9)	4	QFN24
	GD32E232E6U7TR	72	32K	6K	up to 18	1	4	1	2	1	2	1	2	2	1		1			1(9)	4	QFN24
	GD32E232E8U7TR	72	64K	8K	up to 18	1	5	1	2	1	2	1	2	2	2		1			1(9)	4	QFN24
	GD32E232K4Q7TR	72	16K	4K	up to 28	1	4	1	2	1	2	1	2	2	1		1			1(16)	4	QFN32
	GD32E232K6Q7TR	72	32K	6K	up to 28	1	4	1	2	1	2	1	2	2	1		1			1(16)	4	QFN32
	GD32E232K8Q7TR	72	64K	8K	up to 28	1	5	1	2	1	2	1	2	2	2		1			1(16)	4	QFN32



# GD32VF103 series of 32-bit RISC-V 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 <sup>2</sup> C	SPI	CAN 2.0B	USB 2.0 FS	I <sup>2</sup> 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



# GD32E1/C1 series of 32-bit ARM<sup>®</sup> Cortex<sup>®</sup>-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 <sup>2</sup> C	SPI	CAN 2.0B	USB 2.0 FS	I <sup>2</sup> 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
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





# GD32F4 series of 32-bit ARM® Cortex®-M4F MCUs 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	USART +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
GD32F470	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		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		1/0		3(16)	2	LQFP100
	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		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		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		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		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		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		1/1		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		1/1		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		1/1		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		1/1		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		1/1		3(24)	2	BGA176
	GD32F470IHK6	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		1/1		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		1/1		3(24)	2	BGA176



# GD32F4 series of 32-bit ARM® Cortex®-M4F MCUs 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	USART +UART	I²C	SPI	CAN 2.0B	USB OTG	I²S	SDIO	LCD-SDIO TFT	Camera		ETH MAC	IPA		12bit ADC Units (CHs)
GD32D403	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	



# GD32F4 series of 32-bit ARM® Cortex®-M4F MCUs 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	USART +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
	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
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	



# GD32F30x series of 32-bit ARM<sup>®</sup> Cortex<sup>®</sup>-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 <sup>2</sup> C	SPI	CAN 2.0B	USB 2.0 FS	I <sup>2</sup> S	SDIO		Ether-net	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	
	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(16)	2	LQFP144	
	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	



# GD32F30x series of 32-bit ARM<sup>®</sup> Cortex<sup>®</sup>-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 <sup>2</sup> C	SPI	CAN 2.0B	USB 2.0 FS	I <sup>2</sup> S	SDIO		Ether-net	12bit ADC Units (CHs)		12bit DAC Units
GD32F307	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



# GD32F3x0 series of 32-bit ARM<sup>®</sup> Cortex<sup>®</sup>-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	I <sup>2</sup> C	SPI	USB 2.0 FS	I <sup>2</sup> S	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		1			1(10)		QFN28
	GD32F310K8U6	72	64K	8K	up to 27			5	1		1	2	1	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		1			1(10)		LQFP32
	GD32F310C8T6	72	64K	8K	up to 39			5	1		1	2	1	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	



# GD32F3x0 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	I <sup>2</sup> C	SPI	USB 2.0 FS	I <sup>2</sup> S	CEC	Comp	12bit ADC Units (CHs)		12bit DAC Units
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



# GD32F2 series of 32-bit ARM® Cortex®-M3 MCUs 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	USART +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			





# GD32F10x series of 32-bit ARM<sup>®</sup> Cortex<sup>®</sup>-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 <sup>2</sup> C	SPI	CAN 2.0B	USB 2.0 FS	I <sup>2</sup> S	SDIO		Ether-net	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)	2	LQFP64
	GD32F101RDT6	56	384K	48K	up to 51	4		2	1	2	1	5	2	3							1(16)	2	LQFP64
	GD32F101RET6	56	512K	48K	up to 51	4		2	1	2	1	5	2	3							1(16)	2	LQFP64
	GD32F101RFT6	56	768K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)	2	LQFP64
	GD32F101RGT6	56	1024K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)	2	LQFP64
	GD32F101RIT6	56	2048K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)	2	LQFP64
	GD32F101RKT6	56	3072K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)	2	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)	2	LQFP100
	GD32F101VDT6	56	384K	48K	up to 80	4		2	1	2	1	5	2	3						•	1(16)	2	LQFP100
	GD32F101VET6	56	512K	48K	up to 80	4		2	1	2	1	5	2	3						•	1(16)	2	LQFP100
	GD32F101VFT6	56	768K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)	2	LQFP100
	GD32F101VGT6	56	1024K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)	2	LQFP100
	GD32F101VIT6	56	2048K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)	2	LQFP100
	GD32F101VKT6	56	3072K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)	2	LQFP100
	GD32F101ZCT6	56	256K	32K	up to 112	4		2	1	2	1	5	2	3						•	1(16)	2	LQFP144
	GD32F101ZDT6	56	384K	48K	up to 112	4		2	1	2	1	5	2	3						•	1(16)	2	LQFP144
	GD32F101ZET6	56	512K	48K	up to 112	4		2	1	2	1	5	2	3						•	1(16)	2	LQFP144
	GD32F101ZFT6	56	768K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)	2	LQFP144
GD32F101ZGT6	56	1024K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)	2	LQFP144	
GD32F101ZIT6	56	2048K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)	2	LQFP144	
GD32F101ZKT6	56	3072K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)	2	LQFP144	



# GD32F10x 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	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	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
	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	



# GD32F10x 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	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO		Ether-net	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



# GD32F1x0 series of 32-bit ARM<sup>®</sup> Cortex<sup>®</sup>-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 <sup>2</sup> C	SPI	USB 2.0 FS	I <sup>2</sup> S	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