



# GD32F1 series of 32-bit ARM<sup>®</sup> Cortex<sup>™</sup>-M3 MCUs Selection Guide (Nov/2013)

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	



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			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	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	2	2	1	2	1	5	2	3	2	OTG	2					3(16)	2	LQFP64
	GD32F105RET6	108	512K	96K	up to 51	4	2	2	1	2	1	5	2	3	2	OTG	2					3(16)	2	LQFP64
	GD32F105RFT6	108	768K	96K	up to 51	10	2	2	1	2	1	5	2	3	2	OTG	2					3(16)	2	LQFP64
	GD32F105RGT6	108	1024K	96K	up to 51	10	2	2	1	2	1	5	2	3	2	OTG	2					3(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	2	2	1	2	1	5	2	3	2	OTG	2			●		3(16)	2	LQFP100
	GD32F105VET6	108	512K	96K	up to 80	4	2	2	1	2	1	5	2	3	2	OTG	2			●		3(16)	2	LQFP100
	GD32F105VFT6	108	768K	96K	up to 80	10	2	2	1	2	1	5	2	3	2	OTG	2			●		3(16)	2	LQFP100
	GD32F105VGT6	108	1024K	96K	up to 80	10	2	2	1	2	1	5	2	3	2	OTG	2			●		3(16)	2	LQFP100
	GD32F105ZCT6	108	256K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2			●		3(21)	2	LQFP144
	GD32F105ZDT6	108	384K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2			●		3(21)	2	LQFP144
	GD32F105ZET6	108	512K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2			●		3(21)	2	LQFP144
	GD32F105ZFT6	108	768K	96K	up to 112	10	2	2	1	2	1	5	2	3	2	OTG	2			●		3(21)	2	LQFP144
	GD32F105ZGT6	108	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	2	OTG	2			●		3(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	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	2	2	1	2	1	5	2	3	2	OTG	2		●			3(16)	2	LQFP64
	GD32F107RET6	108	512K	96K	up to 51	4	2	2	1	2	1	5	2	3	2	OTG	2		●			3(16)	2	LQFP64



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			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		
GD32F107	GD32F107RFT6	108	768K	96K	up to 51	10	2	2	1	2	1	5	2	3	2	OTG	2		•		3(16)	2	LQFP64	
	GD32F107RGT6	108	1024K	96K	up to 51	10	2	2	1	2	1	5	2	3	2	OTG	2		•		3(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	2	2	1	2	1	5	2	3	2	OTG	2		•	•	3(16)	2	LQFP100	
	GD32F107VET6	108	512K	96K	up to 80	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	3(16)	2	LQFP100	
	GD32F107VFT6	108	768K	96K	up to 80	10	2	2	1	2	1	5	2	3	2	OTG	2		•	•	3(16)	2	LQFP100	
	GD32F107VGT6	108	1024K	96K	up to 80	10	2	2	1	2	1	5	2	3	2	OTG	2		•	•	3(16)	2	LQFP100	
	GD32F107ZCT6	108	256K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	3(21)	2	LQFP144	
	GD32F107ZDT6	108	384K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	3(21)	2	LQFP144	
	GD32F107ZET6	108	512K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	3(21)	2	LQFP144	
	GD32F107ZFT6	108	768K	96K	up to 112	10	2	2	1	2	1	5	2	3	2	OTG	2		•	•	3(21)	2	LQFP144	
	GD32F107ZGT6	108	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	2	OTG	2		•	•	3(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)	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	



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			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		
GD32F101	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	