

Specifications

Product group		M3H group
CPU core		ARM Cortex-M3 – memory protection unit (MPU)
Max operation frequency		120MHz
Internal oscillator		10MHz (+/-1%)
Internal memory	Flash (code)	256KB/384KB/512KB (Rewritable up to 100,000 times)
	Flash (data)	32KB (rewritable up to 100,000 times)
	RAM	64KB (with Parity) and Backup RAM 2KB
I/O port		57 to 135
External interrupt		12 to 23
DMA controller (DMAC)		DMA requests: 2 units, 54 to 64 factors, internal/external triggers
Timer function	T32A	32-bit Timer Event Counter (8 channels as 32-bit timer or 16 channels as 16-bit timer)
	RTC	Real-time Clock: 1 channel
Communication function	UART	Universal Asynchronous Receiver Transmitter: 7 to 8 channels
	I ² C	I ² C Interface: 2 to 4 channels
	TSPI	Serial Peripheral Interface: 1 to 5 channels
Analog function	12-bit AD converter	12 to 21 channels input
	8-bit Digital to Analog converter	2 channels
Motor control	A-ENC	Advanced Encoder Input Circuit: 1 channel
	A-PMD	Advanced Programmable Motor Control Circuit: 1 channel
Other peripherals	RMC	Remote Control Signal Preprocessor: 1 channel
	CRC	CRC Calculation Circuit: 1 channel, CRC32, CRC16
	DLCD	LCD Display Controller - Non-Bias Drive: 40 segments × 4 commons (Max)
System function	SIWDT	1 channel
	LVD	Voltage Detection Circuit: 1 channel
	OFD	Oscillation Frequency Detector: 1 channel
On-chip debug function		Serial Wire / JTAG
Operation voltage		2.7 to 5.5V, single voltage supply
Package / Pin		LQFP144 (20mm x 20mm, 0.5mm pitch) LQFP128 (14mm x 14mm, 0.4mm pitch) LQFP128 (14mm x 20mm, 0.5mm pitch) LQFP100 (14mm x 14mm, 0.5mm pitch) LQFP100 (14mm x 20mm, 0.65mm pitch) LQFP80 (12mm x 12mm, 0.5mm pitch) LQFP64 (10mm x 10mm, 0.5mm pitch)