

# MM32W0130 BLE 5.0 SOC



### MM32W0130: 1-page

#### MM32W0130

#### System

POR, PDR, LVD

Xtal Osc. 32KHz, 4-24MHz

PLL

WDG x 2

CRC

#### Analog

12b ADC, 1Msps, up to 10ch

Comparator x 2

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Arm Cortex-M0 48MHz

NVIC

SWD, SW Debug/ETM

DMA x 5ch

#### Timer

General Purpose

Memory

Up to 64KB Flash

Up to 16KB SRAM

Connectivity

**BLE 5 RF MAC** 

BLE 5 RF TX/RX

Connectivity

UART x 2

SPI x 1

12C x 1

USB 2.0 FS Device

**CAN 2.0B** 

- Core Platform
  - Up to 48MHz Cortex-M0
- Memory
  - Up to 64KByte Flash
  - Up to 16KByte SRAM
- **System Control** 
  - POR, PDR, PVD
  - IRC or Xtal
- RF
  - BLE 5.0, with 2Mbps mode
  - RX sensitivity: -96dBm @ 1Mbps -93dBm @ 2Mbps
  - TX output power at 0/4/8/10 dBm
  - Generic FSK
- Encryption/Decryption
  - AES/SHA-160, 224, 256, 384, 512
  - **HMAC**
  - **ECC**
  - DES, 3DES
- GPIO#:
  - Up to 28 (QFN48)
  - Up to 20 (QFN32)

- Interfaces
  - UART x 2
  - SPI x up to 1
  - 12C x 1
  - **USB 2.0 FS Device**
  - **CAN 2.0B**
- Analog
  - 10ch, 12b SAR ADC with 1Msps
  - Analog Comparator x 2
- Timer
  - General Purpose Timer x 5
  - WDG x 2
  - RTC
- **Power Consumption** 
  - RF TX: 5.4 mA 0bBm
  - RF RX: 5.2 mA (1Mbps)
  - RF Sleep: 0.7 uA
  - RF Deep Sleep: 0.3 uA
  - **SOC Run**
  - **SOC Sleep**
  - **SOC Stop**
  - **SOC Standby**
- Others
  - 2.0 3.6V power supply
  - Operation Temperature: -40~85C
- Package and Pin Counts
  - QFN48 (7x7mm, DC-DC)

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QFN32 (5x5mm, LDO): Package Per Request

Optional

## MM32W0130: Part Numbers and Functions/Features

			Memory				Timer Functions					Connectivity						Analog Interface		Pin Info				
Part No.	Core	Max Speed (MHz)	Flash (KB)		Buc	I/O#	Advanc ed TMR		LP TMR	WD G	RTC	UAR T	LP UAR T	I <sup>2</sup> C	SPI	USB 2.0 FS	CAN 2.0B	1/1 Mene	ACM P	Pin Count s	Packag e	Packag e Size	Connect ivity	Operati on Temp
MM32W0133C4N	M0	48	64	16		20	-	5		2	Υ	2		1	1	D	Υ	10ch	2	32	QFN	5x5	BLE 5	-40~85C
MM32W0133C6N	MO	48	64	16		28	-	5		2	Υ	2		1	1	D	Υ	10ch	2	48	QFN	7x7	BLE 5	-40~85C



Confidential



# **Thanks**



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