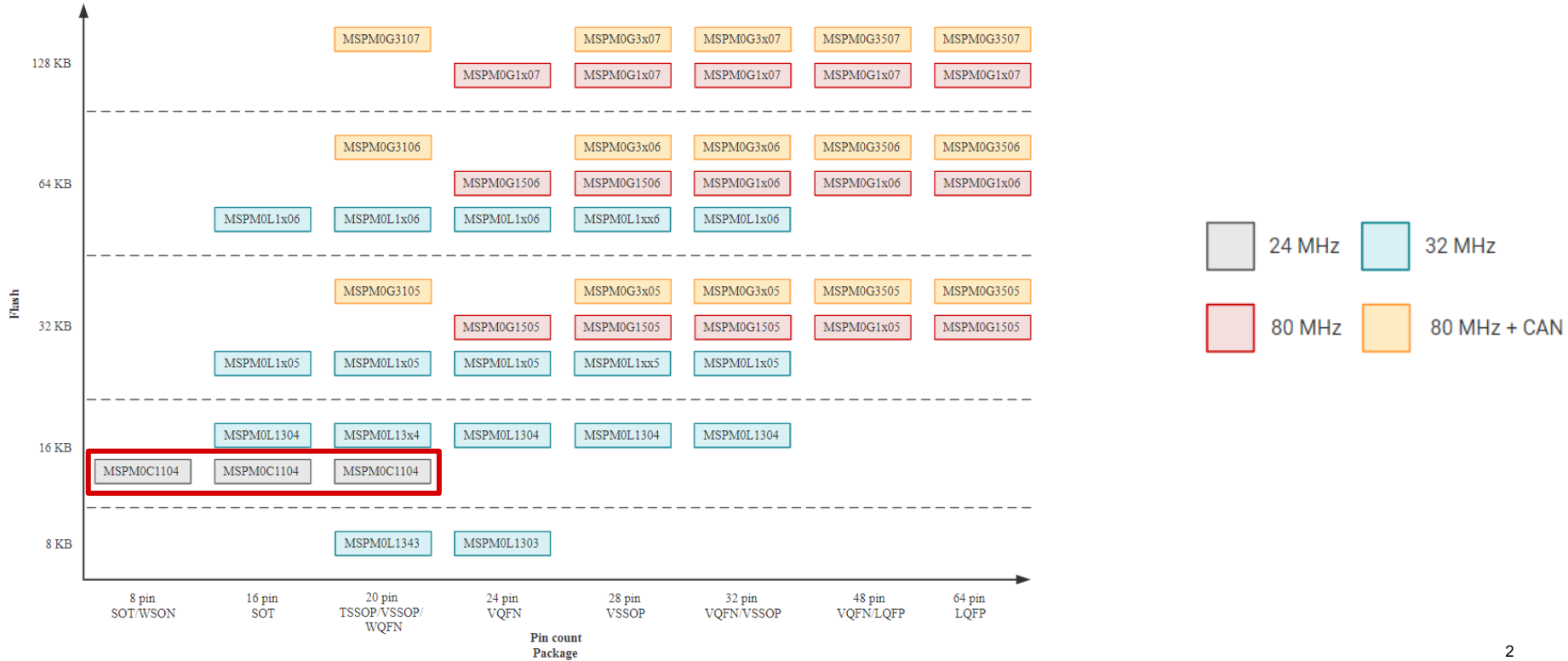


MSPM0C Series

Arm® Cortex® M0+ for 8/16bit cost-optimized applications
Small, low-cost, & easy migration

Expanding our Arm[®] Cortex[®] M0+ portfolio



MSPM0C1103/4 product overview

Low cost

- Optimized cost structure
- Integrated peripherals: 12bit SAR ADC, LIN, advanced timer, etc.

Small package

- 8-pin QFN package: 2.0 x 2.0 mm², 0.50 mm pitch
- 8-pin SOT package: 2.8 x 2.9 mm², 0.65 mm pitch

Effortless Migration

- P2P in hardware with both TI MSPM0 family and selected MCU vendors
- Simplified code migration

MSPM0C1103/4

1.62 - 3.6V
-40 to 125 C

CPU

ARM Cortex-M0+
24 MHz

NVIC / 1-ch Basic DMA

On-chip Memory

8, or 16 kB flash

1 kB SRAM

Data Integrity & Security

CRC accelerator (16 bit)

Programming & Debug

ARM SWD interface

Power & Clocking

POR / BOR

Internal LF 32kHz (3%)

Internal HF 24MHz (1%)

Communication

UART w/ LIN (1)

SPI (1)

I2C (1) w/ FastMode+

Precision Analog

12-bit SAR ADC (10-ch)

Internal ADC reference (1.5%)

Timers

Advanced control 16-bit 4 CC (1)

General purpose 16-bit 4 CC (1)

General purpose 16-bit 2 CC (1)

Windowed watchdog

IO

Up to 18 GPIO

Leaded packages: SOT-8/16, VSSOP-20, TSSOP-20
No-lead packages: WSON-8, WQFN-20

MSPM0 C-series MCUs | broad applications

24 MHz low-cost MCU with up to 16kB flash, 20 pins, 12-bit ADC

BUILDING & FACTORY AUTOMATION



Smoke detector



Gas detector



PIR sensor



Garage sensor



Field transmitter

APPLIANCE



Coffee machine



Power tool



Vacuum cleaner



Dish washer

PERSONAL ELECTRONIC



TWS



Stylus



E-toothbrush



Shaver



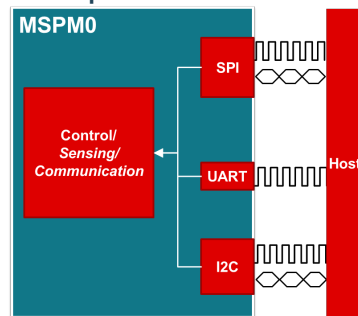
Printer



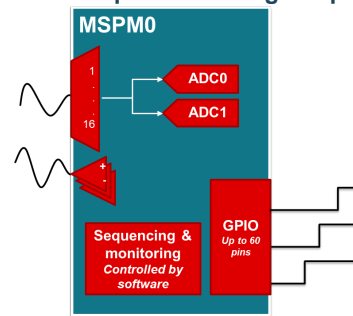
Wireless charger

SUBSYSTEM

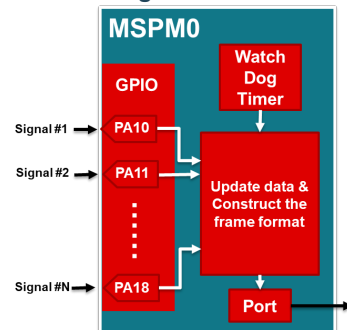
> IO Expander



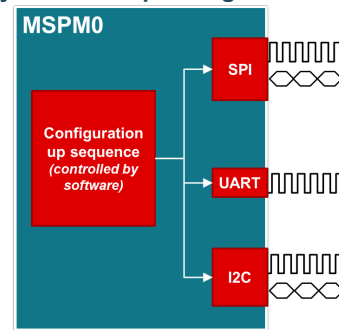
> Power Sequencer/Voltage Supervisor



> Watch Dog



> System startup/configuration controller

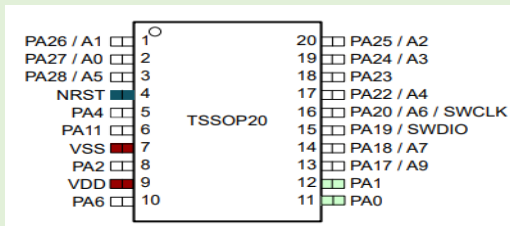


MSPM0 C-series MCUs | effortless migration

24 MHz low-cost MCU with up to 16kB flash, 20 pins, 12-bit ADC

Hardware

P2P with both TI MSPM0 family and selected MCU vendors



MSPM003 TSSOP20 pinout

Software

Simplified code migration with header file replacement.

Library Components			
Compatible Documentation			
IDE Project Templates	Supported Peripherals		
	ADC1	AWU	BEEP
API Compatible Drivers	CLK	EXTI	FLASH
	GPIO	I2C	WWDG
	UART1	RST	SPI
	TIM1	TIM2	TIM4

Improved performance

➤ 32 bit ARM Cortex M0+ core

8/16 bit replacement
24MHz frequency

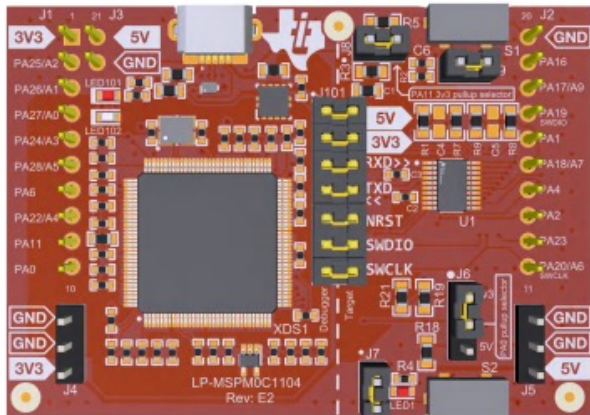
➤ Faster communication

I2C	1 MHz Fast Mode Plus
SPI	12 MHz
UART	3 MHz

➤ Integrated peripherals

12 bit SAR ADC up to 10-ch
16 bit advanced timer

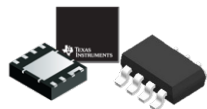
Start your design with MSPM0C now



[LP-MSPM0C1104](#)
Compact EVM available
\$5.99

➤ **MSPM0 TI.com resource:**

- [MSPM0-SDK](#) – MSPM0 Software Development Kit (SDK)
- [MSPM0 Academy](#) – Self-pace training module
- [AN: Migration Guide From STM8 to MSPM0](#)
- [AN: Migration Guide From MSP430 MCUs to MSPM0 MCUs](#)



[MSPM0C1104](#)
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