

# Migration & Development Guide

— MSPM0 ecosystem training series

Presented by Ansley Wang

# MSPM0 Ecosystem

Code Source:



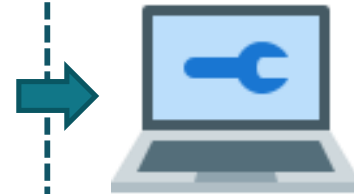
MSPM0-SDK

IDE:



CCS

**ARMKEIL**  
Microcontroller Tools



Debugger:

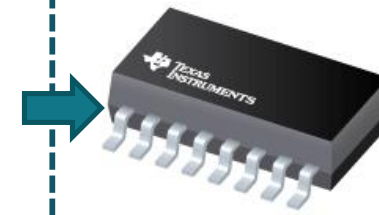


XDS110

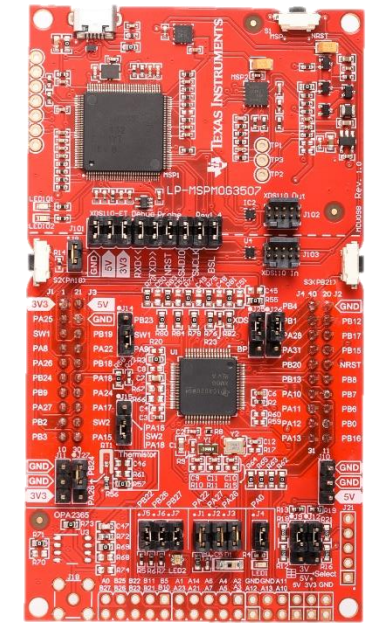


J-LINK

MSPM0:

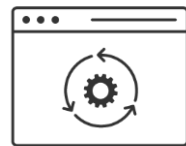


Development Board:



LaunchPad

Code Generator:



SysConfig

PC Programming Tool:



UniFlash

Programmer:



MSP-GANG

# MSPM0 Migration & Development Flowchart









Start

Select MSPM0 device:  
review the portfolio and choose an MCU

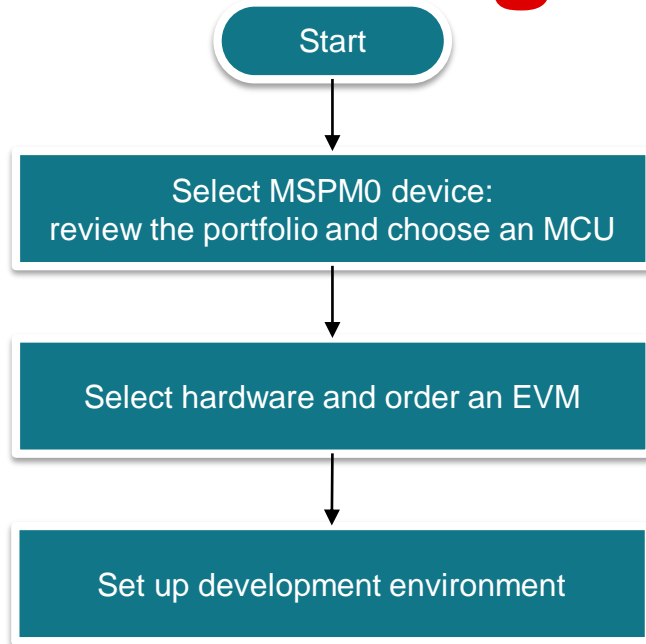
## MSPM0 Online Selection Tool:

 MSPM0 Portfolio Introduction Video

Hide filters Columns Reset table 17 of 17 total products Email Download Excel Log in to view inventory Log in

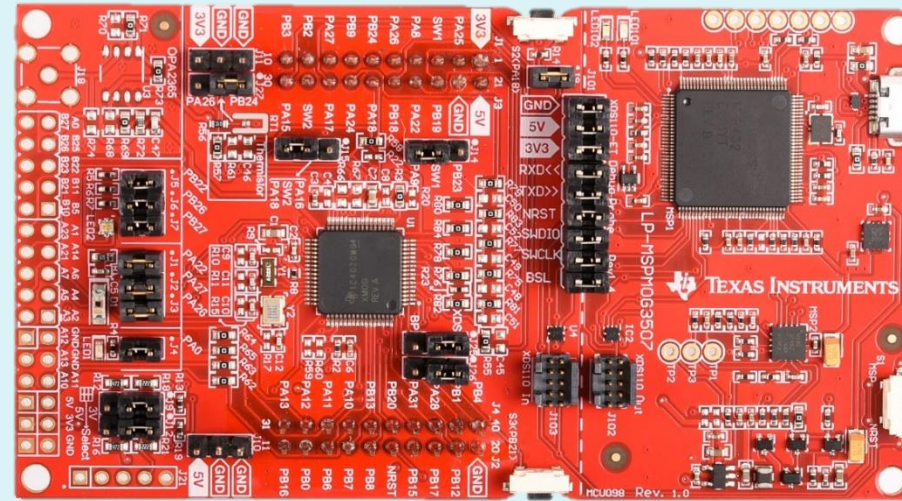
Search...	Product number	Images	CPU	Frequency (MHz)	Flash memory (kByte)	RAM (kByte)	ADC type	Number of GPIOs	UART	Number of I2Cs	Package type	Pin count	Features	Price/Quantity (USD)	Operating temperature range (°C)	Rating
<ul style="list-style-type: none"> <li>Description</li> <li>CPU</li> <li>Frequency (MHz)</li> <li>Flash memory (kByte)</li> <li>RAM (kByte)</li> <li>ADC type</li> <li>Number of GPIOs</li> <li>UART</li> <li>Number of I2Cs</li> <li>Package type</li> <li>Pin count</li> <li>Package area (mm<sup>2</sup>)</li> <li>Package size (L x W) (mm)</li> <li>Features</li> <li>Price/Quantity (USD)</li> <li>Operating temperature range (°C)</li> <li>Rating</li> <li>SPI</li> <li>Status</li> </ul>	<input type="checkbox"/> <b>MSPM0G1106 – NEW</b> <a href="#">Data sheet: PDF   HTML</a> <input checked="" type="checkbox"/> <a href="#">View alternates</a>		Arm Cortex-M0+	80	64	32	12-bit SAR	60	4	2	VQFN	32	5-V-tolerant I/Os, DMA, OpAmp	US\$0.675   1ku	-40 to 105	Catalog
	<input type="checkbox"/> <b>MSPM0G1107 – NEW</b> <a href="#">Data sheet: PDF   HTML</a> <input checked="" type="checkbox"/> <a href="#">View alternates</a>		Arm Cortex-M0+	80	128	32	12-bit SAR	60	4	2	VQFN	24	5-V-tolerant I/Os, DMA, OpAmp	US\$0.761   1ku	-40 to 105	Catalog
	<input type="checkbox"/> <b>MSPM0G1505 – NEW</b> <a href="#">Data sheet: PDF   HTML</a> <input checked="" type="checkbox"/> <a href="#">View alternates</a>		Arm Cortex-M0+	80	32	16	12-bit SAR	60	4	2	VQFN	24	5-V-tolerant I/Os, AES encryption, DMA, RTC, Zero-drift OpAmp	US\$0.651   1ku	-40 to 125	Catalog
	<input type="checkbox"/> <b>MSPM0G1506 – NEW</b> <a href="#">Data sheet: PDF   HTML</a> <input checked="" type="checkbox"/> <a href="#">View alternates</a>		Arm Cortex-M0+	80	64	32	12-bit SAR	60	4	2	VQFN	24	5-V-tolerant I/Os, AES encryption, DMA, RTC, Zero-drift OpAmp	US\$0.711   1ku	-40 to 125	Catalog
	<input type="checkbox"/> <b>MSPM0G1507 – NEW</b> <a href="#">Data sheet: PDF   HTML</a> <input checked="" type="checkbox"/> <a href="#">View alternates</a>		Arm Cortex-M0+	80	128	32	12-bit ADC	44	4	2	VQFN	24	5-V-tolerant I/Os, AES encryption, DMA, RTC, Zero-drift OpAmp	US\$0.831   1ku	-40 to 125	Catalog
	<input type="checkbox"/> <b>MSPM0G3105 – NEW</b> <a href="#">Data sheet: PDF   HTML</a> <input checked="" type="checkbox"/> <a href="#">View alternates</a>		Arm Cortex-M0+	80	32	16	12-bit SAR	–	4	2	VQFN	32	5-V-tolerant I/Os, DMA, Zero-drift OpAmp,CAN	US\$0.675   1ku	-40 to 125	Catalog
	<input type="checkbox"/> <b>MSPM0G3106 – NEW</b> <a href="#">Data sheet: PDF   HTML</a> <input checked="" type="checkbox"/> <a href="#">View alternates</a>		Arm Cortex-M0+	80	64	32	12-bit SAR	–	4	2	VQFN	32	5-V-tolerant I/Os, DMA, Zero-drift OpAmp,CAN	US\$0.735   1ku	-40 to 105	Catalog
	<input type="checkbox"/> <b>MSPM0G3107 – NEW</b> <a href="#">Data sheet: PDF   HTML</a> <input checked="" type="checkbox"/> <a href="#">View alternates</a>		Arm Cortex-M0+	80	128	32	12-bit SAR	28	4	2	VQFN	32	5-V-tolerant I/Os, DMA, Zero-drift	US\$0.855   1ku	-40 to 105	Catalog

# MSPM0 Migration & Development Flowchart



## Low-cost Evaluation Board LaunchPad™:

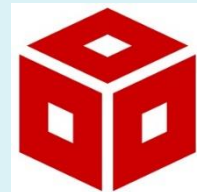
- [LP-MSPM0L1306](#)
- [LP-MSPM0G3507](#)



▶ [LaunchPad™ Training Video](#)

▶ [Hardware Design Guide](#)

## Development Environment:



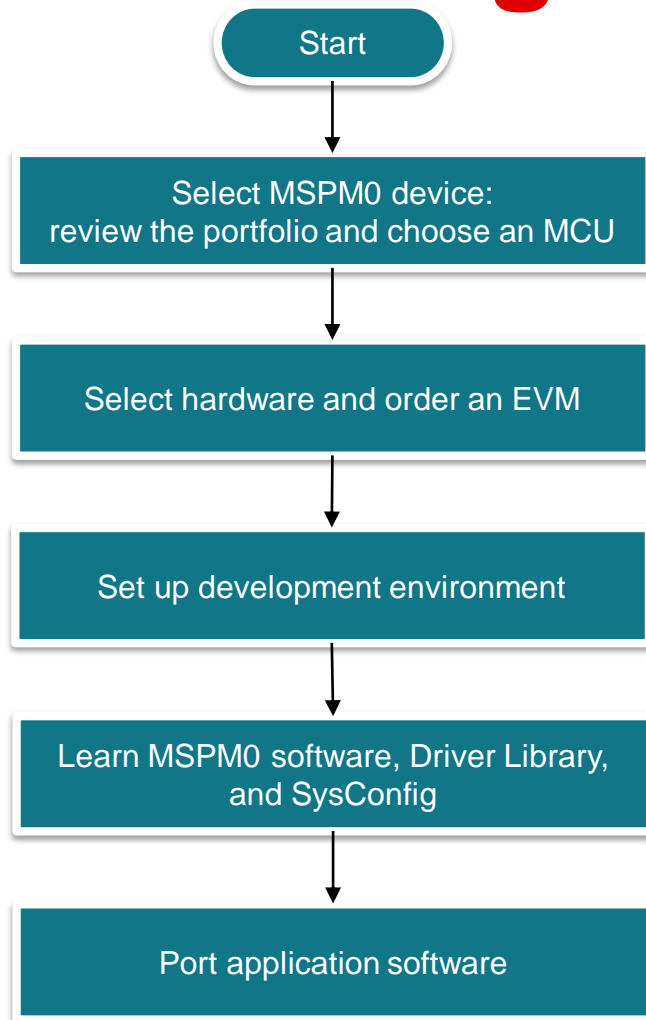
### [Code Composer Studio™](#):

- TI own free IDE



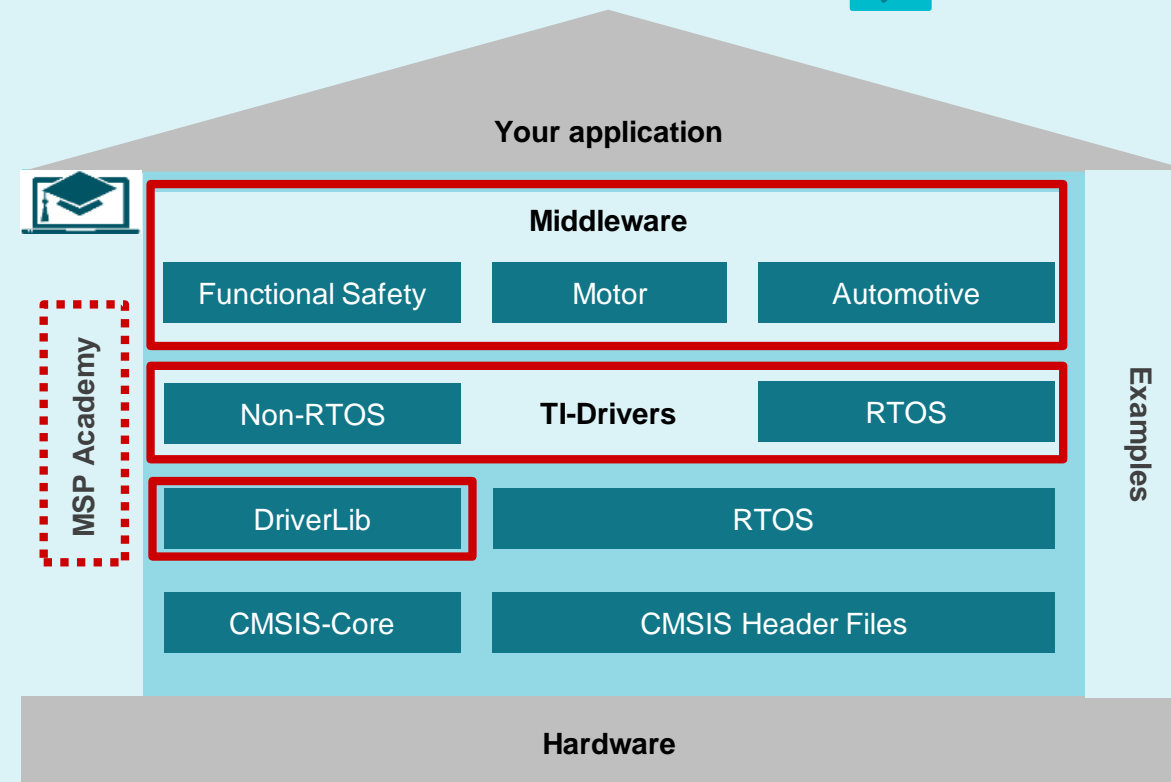
▶ [IDE Training Video](#)

# MSPM0 Migration & Development Flowchart



## MSPM0 SDK (Software Development Kit):

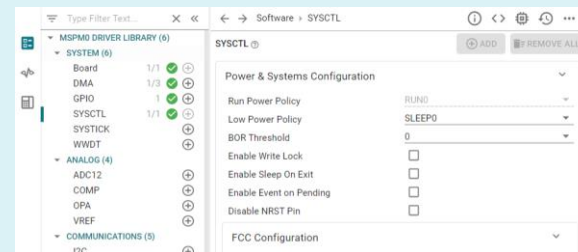
- MSPM0 SDK Training Video
- MSPM0 Academy



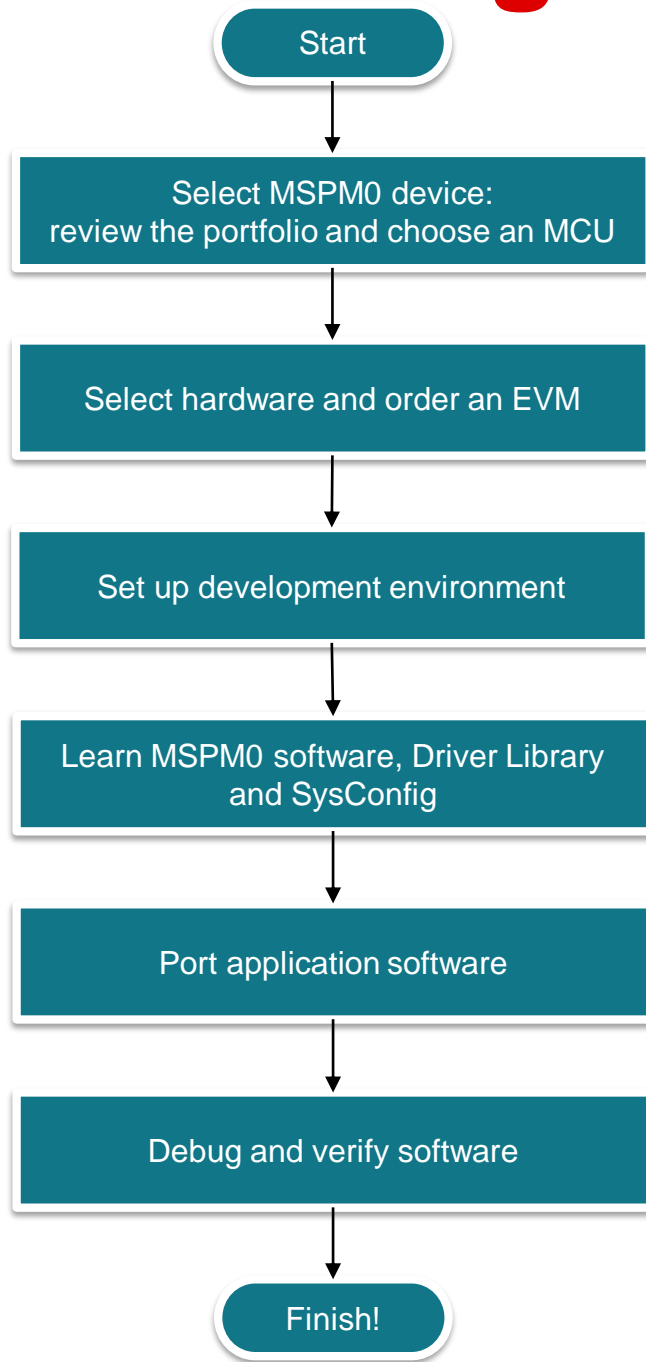
## SysConfig:

- TI own free intuitive graphical configuration tool

- SysConfig Training Video



# MSPM0 Migration & Development Flowchart




## Debugger & Programmer:



[XDS110 JTAG Debug Probe](#)



[UniFlash](#) Software On-chip Flash Programming Tool

 [Programmer Training Video](#)

 [Production Guide](#)



[J-LINK](#)



[MSP-GANG](#) Programmer for Mass Production

## For more details of migration guides, please find:

- [Migration Guide From MSP430 MCUs to MSPM0 MCUs \(Rev. A\)](#)
- [Migration Guide From STM32 to Arm-Based MSPM0 \(Rev. A\)](#)

# To find more MSPM0 training series, please visit:

- [Ti.com.cn](http://ti.com.cn)
- [WeChat \(德州仪器公众号\)](#)
- [Bilibili](#)
- [21IC](#)