

MEC170x

Feature-Rich Embedded Controller for Computing Applications

Manage Your Embedded System with One Chip

Manage all peripherals and I/Os, protect your system and reduce your power consumption and bill of materials with the MEC170x line of products.

MEC170x devices, fitted with flexible power, hardware-based security and an eSPI host interface, are embedded controllers ideal for complex and challenging applications.

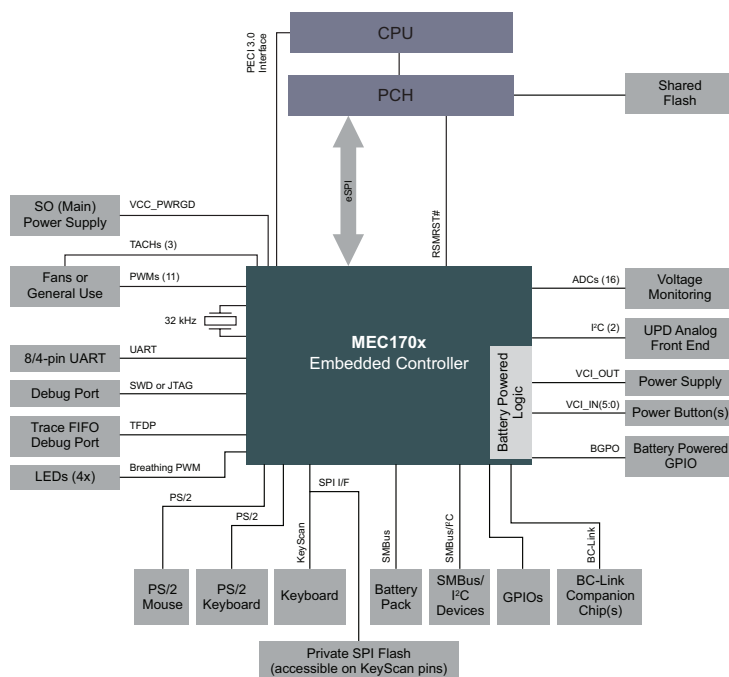


Key Features

- ARM® Cortex®-M4F processor core
- eSPI and LPC host interface for easy migration
- Full 1.8V and 3.3V support for main power and GPIOs
- Immutable secure boot
- 2 KB of integrated EEPROM available
- USB power delivery support
- Fully supported by Microchip's development tools
- Supports hardware accelerated cryptographic functions

Applications

- Notebooks, PCs and tablets
- Industrial automation and safety
- Kiosks and digital signage terminals
- Embedded system management





Microchip's eSPI Advantage

- Pioneered eSPI system with industry partners
- Validated with both Intel® and AMD platforms
- Fully supports all of eSPI channels

Security Features

- Immutable, hardware driven secure boot platform
- Firmware update authentication to prevent code corruption
- True random generator and elliptical curve cryptography to fortify encryption
- Peripheral authentication engine



MEC170x Products

Product	Host Interface	SRAM Memory	Keyboard Matrix Scan Controller	EEPROM	I ² C Ports/ Controllers	UART	GPIOs	VCI	AES Support	SHA Support	ADCs	PWMs	TACHs	Public Key Support	Operating Temperature	Package
MEC1701	eSPI, LPC, I ² C	256 to 480 KB	18 x 8	0	10/4, 11/4	4 pin 8 pin	123/168	4/6	128 to 256 bit	SHA-1 to SHA-512	8/16	8/11	3	RSA: 4 Kbit ECC: 640 bit	0°C to 70°C	144 WFBGA 169 WFBGA
MEC1703	eSPI, LPC, I ² C	256 to 480 KB	18 x 8	2K	10/4, 11/4	4 pin 8 pin	123/168	4/6	128 to 256 bit	SHA-1 to SHA-512	8/16	8/11	3	RSA: 4 Kbit ECC: 640 bit	0°C to 70°C	144 WFBGA 169 WFBGA
MEC1704	eSPI, LPC, I ² C	256 to 480 KB	18 x 8	0	10/4	4 pin 8 pin	123	4	128 to 256 bit	SHA-1 to SHA-512	8	8	3	RSA: 4 Kbit ECC: 640 bit	0°C to 70°C -40°C to 85°C	144 WFBGA
MEC1705	eSPI, LPC, I ² C	256 to 480 KB	18 x 8	2K	10/4	4 pin 8 pin	123	4	128 to 256 bit	SHA-1 to SHA-512	8	8	3	RSA: 4 Kbit ECC: 640 bit	0°C to 70°C -40°C to 85°C	144 WFBGA

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