

Date: January 13, 2020

[www.cypress.com/psoc4](http://www.cypress.com/psoc4)

## NEW PRODUCT ALERT!

### PSoC 4500 Microcontrollers

#### Arm Cortex-M0+ solution with Enhanced Compute and Analog

PSoC 4500 family provides an enhanced PSoC 4 solution for applications like motor control with high-efficient and low-cost ARM Cortex-M0+ and dedicated hardware accelerator for mathematics calculations (division and square-root). It also features a flexible and integrated Analog subsystem with two 12-bit 1Msps SAR ADCs, multiple opamps and comparators. PSoC 4500 offers a high-performance and low-cost solution for applications which require high compute performance and rich analog integration.

The PSoC 4500 provides:

- 48-MHz Arm Cortex-M0+ CPU with 8 DMA channels
- Up to 256KB Flash and 32KB SRAM
- Two accelerators for Divide/Square-Root compute
- External MHz crystal oscillator with PLL option
- Two 12-bit, 1-Msps SAR ADCs
- CapSense with two 7-bit IDACs
- Eight TCPWM blocks and five SCB blocks
- Three Opamps and two LP Comparators
- Up to 53 GPIOs, including 16 Smart I/Os
- 48-TQFP and 64-TQFP (0.5mm and 0.8mm pitch) packages

#### Call to Action:

- [Learn more about PSoC 4, visit www.cypress.com/psoc4](http://www.cypress.com/psoc4)
- [Setup the PSoC 4500 part numbers in your system to help speed up the ordering process](#)
- [Please contact Luke Jiao \(jjiao@cypress.com\)](mailto:jjiao@cypress.com) if you have any question or potential opportunities

#### Ordering Information

Category	Marketing Part Number	Max CPU Speed (MHz)	Flash (KB)	SRAM (KB)	SAR ADC Sample Rate	48-TQFP	64-TQFP (0.5mm pitch)	64-TQFP (0.8mm pitch)	Registerable	Pack Type	MOQ	QI	Availability
45x6	CY8C4546AZI-S473	48	64	16	1 Msps	X			Y	TRAY	250	250	Late April
	CY8C4546AZI-S475	48	64	16	1 Msps		X		Y	TRAY	160	160	Late April
	CY8C4546AXI-S475	48	64	16	1 Msps			X	Y	TRAY	180	180	Late April
45x7	CY8C4547AZI-S453	48	128	32	1 Msps	X			Y	TRAY	250	250	Late April
	CY8C4547AZI-S455	48	128	32	1 Msps		X		Y	TRAY	160	160	Late April
	CY8C4547AZI-S463	48	128	32	1 Msps	X			Y	TRAY	250	250	Late April
	CY8C4547AZI-S465	48	128	32	1 Msps		X		Y	TRAY	160	160	Late April
	CY8C4547AZI-S473	48	128	32	1 Msps	X			Y	TRAY	250	250	ES samples NOW
	CY8C4547AZI-S475	48	128	32	1 Msps		X		Y	TRAY	160	160	ES samples NOW
	CY8C4547AXI-S475	48	128	32	1 Msps			X	Y	TRAY	180	180	Mid-February
45x8	CY8C4548AZI-S475	48	256	32	1 Msps		X		Y	TRAY	160	160	Mid-February
	CY8C4548AXI-S475	48	256	32	1 Msps			X	Y	TRAY	180	180	Late April
	CY8C4548AZI-S483	48	256	32	1 Msps	X			Y	TRAY	250	250	Mid-February
	CY8C4548AZI-S485	48	256	32	1 Msps		X		Y	TRAY	160	160	Mid-February
	CY8C4548AXI-S485	48	256	32	1 Msps			X	Y	TRAY	180	180	ES samples NOW

Price Book and SFDC is the official Price Contract

#### Applications:

- Home Appliance
- Motor control
- Consumer
- Industrial

#### Silicon Logistic Attributes:

- HTS Code: 8542.31.0001
- PB Free: Yes
- ECCN All: 3A991.A.2
- RoHS Compliant: Yes

**Country of Origin:** Taiwan



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**Sample Order Entry:**

- ES Silicon available: NOW, refer to Ordering Information Table

**Production Order Entry:** February and April respectively, refer to Ordering Information Table

**General Information:** *(Please CLICK on the links to access information)*

- Datasheet: [Preliminary PSoC 4500 datasheet](#)
- Press Release: Coming Soon
- PSoC 4 Portfolio New Product Introduction (NPI)
- PSoC 4 page: [www.cypress.com/psoc4](http://www.cypress.com/psoc4)