

# TI's InstaSPIN™ - enabled real-time controllers



TI's [InstaSPIN three-phase motor control solutions](#) are enabled by special libraries in the read-only memory (ROM) of Piccolo microcontrollers (MCUs) that allow you to create products with improved efficiency, performance, and reliability, while reducing development time from months to minutes. TI's InstaSPIN-enabled MCUs provide expertise to designers of sensorless (velocity and torque) or sensed (position, velocity and torque) motor control applications.

16x16 mm  
**F2806x**  
**MCU**

14x14 mm  
**F2805x**  
**MCU**

14x14 mm  
**F2805x**  
**MCU**

9x9 mm  
**F2802x**  
**MCU**

	InstaSPIN Solution	MHz	FPU	CLA Co-Processor	Motors	Flash (KB)	12b ADC Chs	PGA	CAN	QEP	USB	SPI	UART	I2C	Pins	Temp
Click a part number to learn more	<a href="#">F28069M</a>	-MOTION	90	Y	1 or 2	256	16 or 12	--	1	1	1	2	2	1	100/80	-40 to 105° C
	<a href="#">F28068M</a>	-MOTION				--										
	<a href="#">F28069F</a>	-FOC				Y										
	<a href="#">F28068F</a>	-FOC				--										
	<a href="#">F28062F</a>	-FOC				--										
Click a part number to learn more	<a href="#">F28054M</a>	-MOTION	60	--	1 or 2	128	16	4	1	1	--	1	3	1	80	-40 to 125° C Q100
	<a href="#">F28054F</a>	-FOC				128										
	<a href="#">F28052M</a>	-MOTION				64										
	<a href="#">F28052F</a>	-FOC				64										
	<a href="#">F28027F</a>	-FOC				64										
Click a part number to learn more	<a href="#">F28026F</a>	-FOC	60	--	1	64	13	--	--	--	--	1	1	1	48	
	<a href="#">F28026F</a>	-FOC				32										

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Interface	<a href="http://interface.ti.com">interface.ti.com</a>
Logic	<a href="http://logic.ti.com">logic.ti.com</a>
Power Mgmt	<a href="http://power.ti.com">power.ti.com</a>
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RFID	<a href="http://www.ti-rfid.com">www.ti-rfid.com</a>
OMAP Applications Processors	<a href="http://www.ti.com/omap">www.ti.com/omap</a>
Wireless Connectivity	<a href="http://www.ti.com/wirelessconnectivity">www.ti.com/wirelessconnectivity</a>

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Consumer Electronics	<a href="http://www.ti.com/consumer-apps">www.ti.com/consumer-apps</a>
Energy and Lighting	<a href="http://www.ti.com/energy">www.ti.com/energy</a>
Industrial	<a href="http://www.ti.com/industrial">www.ti.com/industrial</a>
Medical	<a href="http://www.ti.com/medical">www.ti.com/medical</a>
Security	<a href="http://www.ti.com/security">www.ti.com/security</a>
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