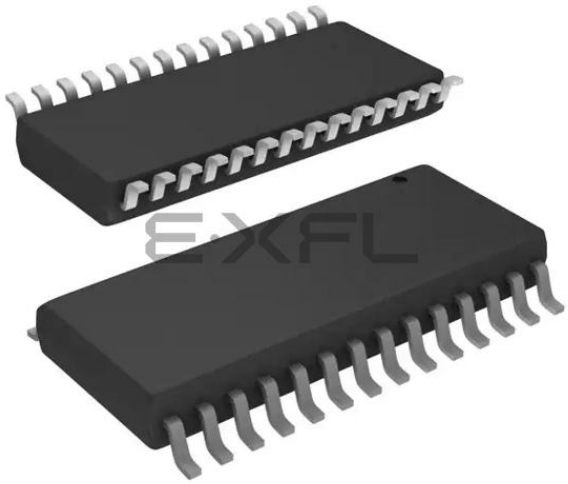

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What is "Embedded - Microcontrollers"?

"Embedded - Microcontrollers" refer to small, integrated circuits designed to perform specific tasks within larger systems. These microcontrollers are essentially compact computers on a single chip, containing a processor core, memory, and programmable input/output peripherals. They are called "embedded" because they are embedded within electronic devices to control various functions, rather than serving as standalone computers. Microcontrollers are crucial in modern electronics, providing the intelligence and control needed for a wide range of applications.

Applications of "Embedded - Microcontrollers"

Details	
Product Status	Active
Core Processor	PIC
Core Size	8-Bit
Speed	64MHz
Connectivity	I²C, SPI, UART/USART
Peripherals	Brown-out Detect/Reset, HLVD, POR, PWM, WDT
Number of I/O	24
Program Memory Size	32KB (16K x 16)
Program Memory Type	FLASH
EEPROM Size	256 x 8
RAM Size	1.5K x 8
Voltage - Supply (Vcc/Vdd)	1.8V ~ 3.6V
Data Converters	A/D 19x10b
Oscillator Type	Internal
Operating Temperature	-40°C ~ 85°C (TA)
Mounting Type	Surface Mount
Package / Case	28-SOIC (0.295", 7.50mm Width)
Supplier Device Package	28-SOIC
Purchase URL	https://www.e-xfl.com/product-detail/microchip-technology/pic18lf25k22t-i-so

TABLE 3: PIC18(L)F4XK22 PIN SUMMARY (CONTINUED)

40-PDIP	40-UQFN	44-TQFP	44-QFN	I/O	Analog	Comparator	CTMU	SR Latch	Reference	(E)CCP	EUSART	MSSP	Timers	Interrupts	Pull-up	Basic
9	24	26	26	RE1	AN6					P3B						
10	25	27	27	RE2	AN7					CCP5						
1	16	18	18	RE3											Y	$\overline{MCLR}$ V_{PP}
11, 32	7, 26	7, 28	7,8 28, 29	V_{DD}												V_{DD}
12, 31	6, 27	6, 29	6, 30, 31	V_{SS}												V_{SS}
—	—	12, 13 33, 34	13	NC												

Note 1: CCP2 multiplexed in fuses.
2: T3CKI multiplexed in fuses.
3: CCP3/P3A multiplexed in fuses.
4: P2B multiplexed in fuses.

27.3 DC Characteristics: RC Run Supply Current, PIC18(L)F2X/4XK22

PIC18LF2X/4XK22		**Standard Operating Conditions (unless otherwise stated)** Operating temperature -40°C ≤ TA ≤ +125°C					
PIC18F2X/4XK22		**Standard Operating Conditions (unless otherwise stated)** Operating temperature -40°C ≤ TA ≤ +125°C					
Param No.	**Device Characteristics**	**Typ**	**Max**	**Units**		**Conditions**	
D020	Supply Current (IDD)(1),(2)	3.6	23	µA	-40°C	VDD = 1.8V	FOSC = 31 kHz (**RC_RUN** mode, LFINTOSC source)
		3.9	25	µA	+25°C		
		3.9	—	µA	+60°C		
		3.9	28	µA	+85°C		
		4.0	30	µA	125°C		
D021		8.1	26	µA	-40°C	VDD = 3.0V	
		8.4	30	µA	+25°C		
		8.6	—	µA	+60°C		
		8.7	35	µA	+85°C		
		10.7	40	µA	+125°C		
D022		16	35	µA	-40°C	VDD = 2.3V	FOSC = 31 kHz (**RC_RUN** mode, LFINTOSC source)
		17	35	µA	+25°C		
		18	35	µA	+85°C		
		19	50	µA	+125°C		
D023		18	50	µA	-40°C	VDD = 3.0V	
		20	50	µA	+25°C		
		21	50	µA	+85°C		
		22	60	µA	+125°C		
D024		19	55	µA	-40°C	VDD = 5.0V	
		21	55	µA	+25°C		
		22	55	µA	+85°C		
		23	70	µA	+125°C		
D025		0.14	0.25	mA	-40°C to +125°C	VDD = 1.8V	FOSC = 500 kHz (**RC_RUN** mode, MFINTOSC source)
D026		0.17	0.30	mA	-40°C to +125°C	VDD = 3.0V	
D027		0.18	0.25	mA	-40°C to +125°C	VDD = 2.3V	FOSC = 500 kHz (**RC_RUN** mode, MFINTOSC source)
D028		0.20	0.30	mA	-40°C to +125°C	VDD = 3.0V	
D029		0.25	0.35	mA	-40°C to +125°C	VDD = 5.0V	

Note 1: The supply current is mainly a function of operating voltage, frequency and mode. Other factors, such as I/O pin loading and switching rate, oscillator type and circuit, internal code execution pattern and temperature, also have an impact on the current consumption.
Test condition: All Peripheral Module Control bits in PMD0, PMD1 and PMD2 set to ‘1

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