

## PSoC 5LP Embedded Board Comparison Table

*Here is the comparison table of several widely used PSoC 5LP boards. The information was gathered from individual board descriptions, datasheets, and schematics. If you find an error within this table, please let us know.*

	<b>Cypress</b>					
	<b>EagleSoC Dev</b>	<b>EagleSoC Mini</b>	<b>FreeSoC V2</b>	<b>CY8CKIT-001</b>	<b>CY8CKIT-050</b>	<b>CY8CKIT-059</b>
<b>Powered by USB Port</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Regulator Max. Current</b>	5V & 3.3V @ 3A	5V & 3.3V @ 1A	5V & 3.3V @ 500mA	5V @ 800mA  3.3V @ 300mA	5V @ 1A & 3.3V 0.8A for Digital  5V/3.3V @ 0.5A for Analog	USB Power Only
<b>Vdd Voltage Selector</b>	3.3V / 5V	3.3V / 5V	No	3.3V / 5V	No	No
<b>Digital Voltage Selector (Vddd)</b>	3.3V / 5V / Vadj	3.3V / 5V / Vadj	3.3V	3.3V / 5V / Vadj	3.3V / 5V	5V
<b>Analog Voltage Selector (Vdda)</b>	3.3V / 5V / Vadj	3.3V / 5V / Vadj	5V	3.3V / 5V / Vadj	3.3V / 5V	5V
<b>I/O Voltages (Vddio0~Vddio3)</b>	Yes;	Yes;		Yes;	Vddio0 & Vddio3 to Vdda;	
<b>(Multi-Voltage Domains)</b>	3.3V / 5V / Vadj;  4 Voltage Groups	3.3V / 5V / Vadj;  4 Voltage Groups	3.3V / 5V;  2 Voltage Groups	3.3V / 5V / Vadj;  4 Voltage Groups	Vddio1 & Vddio2 to Vddd	5V
<b>Separate Power Ground Return paths</b>	Yes	Yes	No	No	Yes	No
<b>LCD Connector Support</b>	Yes;  3.3V / 5V  with Backlight Control	No	No	Yes;  5V	Yes;  3.3V (5V Optional)	No
<b>Onboard USB-to-UART</b>	Yes;  3.3V / 5V for IO	No	No	Standard RS-232 IO Voltage based on Vdd	Standard RS-232 IO Voltage Based on Vddd	No
<b>Debug Port Support</b>	SWD;  TRACE	SWD	Onboard Debugger	SWD;  TRACE	SWD;  Onboard Debugger	Onboard Debugger;  (SWD Option)

<b>External Oscillators 24MHz &amp; 32.768KHz</b>	Yes	Yes	Option	Yes	Yes	No
<b>External Oscillator Slot</b>	Yes	No	No	Yes	No	No
<b>SAR bypass Jumper</b>	Yes	Yes	No	No	Yes	No
<b>Arduino Shield Compatibility</b>	No	No	Yes	No	No	No