Pmod™
Peripheral Modules

Flexible peripheral modules for all your designs.

Pmods™ are small I/O interface boards that offer an ideal way to extend the capabilities of programmable logic and embedded control boards. They allow sensitive signal conditioning circuits and high-power drive circuits to be placed where they are most effective - near sensors and actuators.

Pmods communicate with system boards using 6 or 12-pin connectors that can carry up to 4 or 8 digital control signals, including SPI and other serial protocols. Pmods allow more effective design partitions by routing analog signals and power supplies only where they are needed, and away from digital controller boards.

8LD	Eight high bright LEDS driven by logic level inputs.	**DA3**	Single 16-bit, serial input, unbuffered voltage output digital-to-analog converter.	**OD1**	Provides four open drain outputs at up to 3A sent to screw terminal connectors.
ACL	3-axis digital accelerometer with SPI and I²C interfaces. Includes single/double tap & free-fall detection.	**DA4**	Converts 8 12-bit channels of output from digital to analog.	**OLED**	128 X 32 pixel OLED display w/ internal display buffer and a standard SPI interface.
ACL2	3-axis MEMS accelerometer with 12-bit resolution & an SPI interface. Includes single/double tap & free-fall detection.	**DHB1**	Dual H-Bridge motor driver - can drive 2 DC motors or 1 stepper motor	**PMON1**	Digital power monitor capable of monitoring from 3.16V to 26V. Includes configurable alert and an I²C interface.
AD1	Converts 2 analog signals to 12-bit digital at a maximum sampling rate of one MSa/second.	**DIP**	DIP-to-Pmod adapter, allowing you to add a 2x6-pin Pmod interface to your solderless breadboard project.	**PS2**	Provides a PS/2 port for the connection of a mouse or keyboard.
AD2	Converts up to 4 analog signals to 12-bit digital. Features an I²C interface.	**DPOT**	Digital potentiometer w/ 256 resistance levels, screw terminal & MTE connections, and 1 3-wire SPI interface.	**R2R**	Resistor ladder D/A converter supporting 8-bit conversion at up to 25 MHz.
AD5	Converts 4 differential (or 8 pseudo-differential) inputs to 24-bit digital. Features an SPI interface.	**ENC**	Rotary Encoder Module with integral push-button. Also includes a slide switch.	**REG1**	Voltage regulator able to provide up to 250ma of current at 3.3V.
ALS	Ambient light sensor with 8-bit resolution and an SPI interface.	**GPS**	GPS module featuring a GlobalTop Gms-u1LP antenna module w/ low power consumption & UART interface.	**RF2**	IEEE 802.15 wireless radio transciever that supports ZigBee®, MiWi™, MiWi P2P and other protocols.
AMP2	Amplifies low power audio signals to drive a monophonic output.	**GYRO**	3-axis digital gyroscope with SPI & I²C interfaces. Includes selectable resolutions and a built-in temperature sensor.	**RS232**	DB9 connector driven by logic level inputs translated to RS232 voltage.
AMP3	2W stereo power amplifier w/ digital input. Works with I²C audio protocol or TDM. Can also operate stand-alone.	**GYRO2**	1-axis high-performance digital gyroscope with ±300°/sec angular rate sensing and a simple SPI interface.	**RTCC**	Real-time clock/calendar w/ battery backup, 128bytes EEPROM, 64 bytes SRAM, 2 alarms, & I²C interface.
BB	Easy prototyping with a 266 tie point wire wrap area. Ships with a 170 tie point bread board.	**HB3**	2A H-bridge module ideal for driving small to medium-sized DC motors using screw terminal connectors.	**SD**	Provides a convenient SD card interface for use with Digilent system and microcontroller boards.
BT2	Bluetooth module using a simple UART interface. Works in a wide range of modes.	**HB5**	2A H-bridge module ideal for driving small to medium-sized DC motors using 6-pin JST connector.	**SF**	Provides 16Mbit (2Mbyte) of flash ROM memory, accessible via an SPI interface.
BTN	Four debounced momentary pushbuttons.	**I²S**	Stereo audio output w/ stereo D/A converter and supporting 16 to 24-bit audio at multiple sample rates.	**SF2**	Provides 128Mbit (16Mbyte) of serial PCM memory, accessible via an SPI interface.
CDC1	Demonstrates capacitance-to-digital proximity sensing through two capacitative "buttons". Uses I²C interface.	**IOXP**	I/O port expander w/ an I²C interface, 16-element FIFO, 19 I/Os, keypad decoding, PWM generator, & more.	**SSD**	Two-digit high bright seven-segment display.
CLP	16x2 character LCD with optional backlight and 3.3V or 5V operation.	**JSTK**	Two-axis resistive joystick with an integrated center button and two additional push buttons.	**STEP**	Stepper motor driver w/ a push-pull 4-channel driver, driving up to 600 mA per channel. Host or external power.
CLS	16x2 character LCD display, controlled via UART, SPI or TWI and a simple terminal-like interface.	**KYPD**	16-button keypad, numbered hexadecimally (0-9, A-F).	**SWT**	Four slide switches.
CMPS	3-axis digital compass with ±8 gauss field detection and an I²C interface.	**LED**	Four high bright LEDS driven by logic level inputs.	**TMP2**	Temperature & thermostat control module with up to 16-bit resolution and an I²C interface.
CON1	Six screw terminal inputs. (four for I/O, two for VCC & GND)	**LS1**	Line sensor interface for connecting up to four optical sensors.	**TMP3**	Temperature sensor module w/ programmable 9 to 12-bit resolution, ±1°C accuracy & an I²C interface.
CON3	Route 4 digital signals to four three-pin servo motor connectors.	**MAX-SONAR**	Single-transducer ultrasonic range finder. Can measure distances over 20 feet with 1-inch resolution.	**TPH**	Six test points for in-line debugging between a system board and a Pmod.
CON4	Route two of four jumper-selectable digital signals to two RCA connectors.	**MIC**	Small form-factor electret microphone with preamp, dynamic range compressor, and 12bit A/D converter.	**TPH2**	Twelve test points for in-line debugging between a system board and a Pmod.
DA1	Converts 4 8-bit channels of output from digital to analog at up to one MSa/second.	**NIC100**	IEEE 802.3 Ethernet controller with an SPI interface. Offers MAC support and 10/100 Mbs operation.	**USBUART**	USB to serial UART interface with a micro USB connector.
DA2	Converts 2 12-bit channels of output from digital to analog at up to one MSa/second.	**OC1**	Provides four open collector outputs at up to 200 mA sent to a 6-pin header connector.		

Key: Input/Output   Sensors/Actuators   Data Conversion   Connectors   Misc.

DIGILENT®