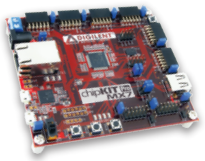
chipKIT™ / chipKIT™ Pro

32-Bit Power for the Arduino™ Community.

Our chipKIT™ development boards are the first 32-bit-microcontroller-based platforms that are compatible with many existing Arduino™ code examples, reference materials and other resources.

Key Features:
- Pin-out compatibility with many existing Arduino™ shields that can operate at 3.3V
- Lower price-point at four times the performance than existing solutions
- Advanced capabilities including integrated USB (Device/Host, OTG), integrated Ethernet, and more.

chipKIT Pro MX7



The chipKIT™Pro MX7 is the perfect PIC32-powered platform for communications projects. It combines 10/100 Ethernet, two ECAN interfaces, and USB 2.0 OTG. Additional I/O is provided via six Pmod™ connectors. chipKIT Pro boards also include an integrated programmer / debugger circuit for connection with Microchip MPLAB®.

- Microchip® PIC32MX795F512
  80 Mhz 32-bit MIPS
  512K Flash, 128K RAM
  10/100 Ethernet, ECAN, USB 2.0 OTG
- Can also be programmed in MPLAB
- 48 available I/O

chipKIT Pro MX4

The chipKIT™Pro MX4 is a general purpose PIC32 platform offering a great assortment of I/O options. It combines nine Pmod™ connectors, eight R/C servo connectors, and USB 2.0 OTG. chipKIT Pro boards also include an integrated programmer / debugger circuit for connection with Microchip MPLAB®.

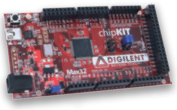
- Microchip® PIC32MX795F512
  80 Mhz 32-bit MIPS
  512K Flash, 32K RAM
  USB 2.0 OTG
- Can also be programmed in MPLAB
- 72 available I/O

chipKIT MX3

The chipKIT™ MX3 is a general purpose PIC32 platform in a smaller package. It is similar to the uC32 but features five Pmod™ connectors in place of shield connectors.

- Microchip® PIC32MX795F512
  80 Mhz 32-bit MIPS
  512K Flash, 32K RAM
- Can also be programmed in MPLAB
- 40 available I/O

chipKIT Max32



The chipKIT™Max32 is the same form factor as the Arduino Mega board and is compatible with many standard Arduino™ shields as well as larger shields for use with the Mega boards. It features a USB serial port interface for connection to the IDE and can be powered via USB or an external power supply.

- Microchip® PIC32MX795F512
  80 Mhz 32-bit MIPS
  512K Flash, 128K RAM
  USB 2.0 OTG / 10/100 Ethernet MAC
- Can also be programmed in MPLAB
- Arduino™ "Mega" form factor
- 83 available I/O

chipKIT Uno32

The chipKIT™Uno32 is the same form factor as the Arduino™ Uno board and is compatible with many Arduino™ shields. It features a USB serial port interface for connection to the IDE and can be powered via USB or an external power supply.

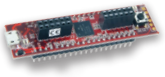
- Microchip® PIC32MX320F128 processor
  80 Mhz 32-bit MIPS
  128K Flash, 16K SRAM
- Can also be programmed in MPLAB
- Arduino™ "Uno" form factor
- 42 available I/O

chipKIT uC32

The chipKIT™uC32 is similar to the Uno32 but comes with additional memory. It's the same form factor as the Arduino™ Uno board and is compatible with many Arduino™ shields.

- Microchip® PIC32MX340F512H
  80 Mhz 32-bit MIPS
  512K Flash, 32K SRAM
- Can also be programmed in MPLAB
- Arduino™ "Uno" form factor
- 42 available I/O

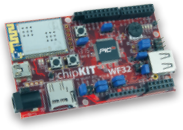
chipKIT CMOD



The chipKIT™ Cmod provides a PIC32 microprocessor in a standard 40-pin DIP package. It is intended for use by those building their own circuits on solderless breadboards.

- Microchip® PIC32MX150F128D
  40 Mhz 32-bit MIPS
  128K Flash, 32K RAM
- Two Pmod™ connectors
- Can also be programmed in MPLAB
- 40-pin DIP form factor
- 34 available I/O

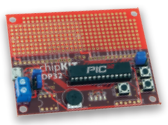
chipKIT WF32



The chipKIT™WF32 features an integrated WiFi interface, an SD card interface, and USB host/device capability. It is intended as a network appliance, perfect for experimentation with embedded web servers.

- Microchip® PIC32MX695F512
  80 Mhz 32-bit MIPS
  512K Flash, 128K RAM
  USB 2.0 OTG / 802.11g
- SD card interface
- Can also be programmed in MPLAB
- 42 available I/O

chipKIT DP32

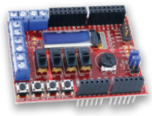


The chipKIT™DP32 combines the power of the Microchip® PIC32MX250F128B with a wire wrap prototyping area, provision for an EEPROM non-volatile memory, an analog temperature sensor, a potentiometer, buttons and LEDs in a single board.

- Microchip® PIC32MX250F128B
  40/50 MHz 32-bit MIPS
  128K Flash, 32K SRAM
- Can also be programmed in MPLAB
- 19 available I/O pins - up to 9 analog inputs
- 1 Potentiometer, 4 LEDs, 2 push buttons
- Wirewrap prototype area

Shield Boards and Accessories

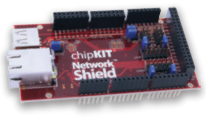
chipKIT™ Basic I/O Shield



The chipKIT Basic I/O Shield adds a variety of useful I/O devices to the chipKIT Uno32 or the chipKIT Max32. It provides simple I/O such as buttons, switches and LEDs, as well as more complex devices such as an I²C™ EEPROM, an I²C temperature sensor, and a 128x32 pixel organic LED graphic display.

- Usable with the Max32, Uno32, & uC32
- 128x32 OLED Graphic Display
- Digital temperature sensor
- 256kbit EEPROM
- 4 switches, 4 push buttons, 8 LEDs
- 4 Open drain transistor outputs
- Analog potentiometer

chipKIT™ Network Shield



The chipKIT Network Shield expands the capabilities of the chipKIT Max32 to take advantage of all of the advanced features of the PIC32MX795 microcontroller. It adds 10/100 Ethernet, USB and CAN communications plus additional features.

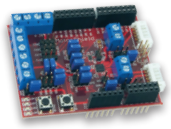
- Usable with the Max32
- 10/100 Ethernet
- USB Host, Device, OTG
- Dual CAN transceivers
- Dual I2C™ connectors
- 256kbit I2C™ EEPROM
- 32.768 Khz oscillator for RTCC

chipKIT™ WiFi Shield

The WiFi Shield makes use of the Microchip MRF24WB0MA WiFi module and provides chipKIT microcontroller boards the ability to connect to and communicate via IEEE 802.11 compatible wireless networks.

- Usable with the Max32, Uno32, & uC32
- IEEE 802.11b-compliant RF transceiver
- 1 and 2Mbps data rates
- IEEE 802.11b/g/n-compatible
- Integrated PCB antenna
- Micro SD card connector
- Four LEDs

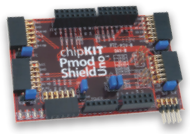
chipKIT™ Motor Shield



The Motor Shield is perfect for driving various types of motors in robotics projects. It has two H-bridges which can drive either two DC motors or one bipolar stepper motor. It also has four power FETS which can drive solenoids or a unipolar stepper motor. Rounding it all off are four R/C servo connectors and additional I/O.

- Usable with the Uno32, uC32, WF32
- Two H-bridges, four power FETs
- Four R/C servo connectors
- Additional I/O via an I²C I/O extender: (four LEDS, two pushbuttons, two jumpers)

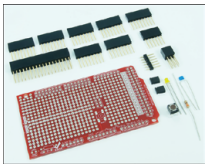
chipKIT™ Pmod Shield Uno



The chipKIT Pmod Shield-Uno is an input / output expansion board for use with the chipKIT Uno32™. It provides the additional circuitry and connectors to allow Digilent Pmod™ peripheral modules to be used with the Uno32.

- Usable with the Uno32
- Five 2x6-pin Digilent Pmod connectors
- One 6-pin SPI connector
- One I²C daisy chain connector

chipKIT™ ProtoShield



Need to create your own shield boards? Our ProtoShield kits are perfect. Available for both the Uno32 & the Max32, each kit includes all the parts required to bring signals from your chipKIT board to the prototyping area.

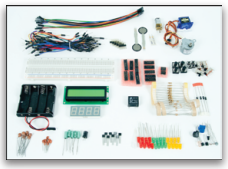
- Available for the Uno32 & Max32
- On-board 5 Volt power LED
- On-board MCU reset button
- Two selectable power busses in center of board for ease of wiring your project
- DIY configurable - load only the parts you want

chipKIT™ PGM

The chipKIT PGM is a simple, low cost, module that supports in-system programming and debugging of applications written for Microchip PIC based microcontroller boards such as the chipKIT™ and Cerebot boards. It is designed to work with the MPLAB® and MPLAB® X development environments available from Microchip.

The chipKIT PGM can also be used to enable in-system debugging of sketches developed using the Arduino™ compatible MPIDE development environment.

chipKIT™ Starter Kit



The chipKIT Starter Kit provides a wide range of sensors, actuators, and electronic components at a remarkably low cost, enabling the construction of an endless array of projects that can serve to inform beginners or empower experts. The kit's parts have been selected to facilitate the creation of fun, useful, and entertaining projects, while at the same time facilitating the exploration of multiple disciplines, from optics to mechanics, from electrical engineering to computer science.

- Output and Displays:
  LCD display, four-digit seven-segement display, buzzer, red, green, and yellow LEDs, tri-color LED, IR emitter
- Passive Elements:
  Resistors, potentiometers, capacitors, inductor, buttons, slider, switches, jumper wires
- Sensors:
  Force-sensitive resistors, piezo sensor, photo sensors, IR detector, temperature sensor
- Electronics and ICs:
  Diodes, voltge regulator, N- and P-FET transistors, operational amplifier, digital-to-analog converter, 555 timer, comparator, Schmidt trigger, Darlington array, H-bridge, decoder / demux, 8-bit shift register, I²C I/O expander, analog 8x1 mux / demux
- Motors/Actuators:
  DC motor, stepper motor, servo, relay
- Miscellaneous:
  Battery pack, breadboard

chipKIT™ Pro / chipKIT™