

Microchip Technology a [Cymbet Corporation](#), spojili svoje sily a vytvorili vývojový kit, získavajúci si energiu z okolia.

Kit pozostáva z modulárnej vývojovej dosky obsahujúcej mikrokontrolér [PIC24F16KA102](#) a z dosky EnerChip EH Eval-08 Energy Harvesting Board, získavajúcej solárnu energiu, ktorú uchováva v bloku EnerChip solid-state.

Ďalej môžu byť pripojené aj PICtail daughter boards, ktoré zvýšia možnosti kitu o rôzne funkcie ako napríklad ZigBee konektivitu, alebo SD Card rozhranie.



Vlastnosti

- Solar Energy Harvester with EnerChip storage devices providing backup power
- Flexible development platform with temperature sensors, EEPROM, potentiometer, capacitive sensors, buttons, LEDs, USB, and low power oscillator.
- Expansion connector for development with PICtails such as RF
- Prototyping area for adding additional sensors and circuits
- PICkit 3 Programmer/Debugger for application software development
- PIC24F eXtreme Low Power MCU with 20nA sleep currents

Kit obsahuje

- Cymbet Eval-08 Solar Energy Harvesting Board and Cable
- XLP 16-bit Development Board
- PIC24F16KA102 Microcontroller
- PICkit 3 Programmer/Debugger
- USB Cables
- XLP 16-bit Energy Harvesting Development Kit user guide

Vlastnosti XLP 16-bit Development Board

- PIC24F16KA102 (16KB Flash, 28-pins, XLP Device with 20nA Deep Sleep current)

- Supports other PIC24F devices in 20 or 28-pins
- Current measurement terminals allow device or board level current measurements (optional XLP Current Measurement Cable available)
- PICtail™ daughter board connector for connection to expansion boards such as RF, SD/MMC Cards, Speech Playback and more
- mTouch™ capacitive sensing buttons for user input
- Expansion connector accessing full device pin-out and breadboard prototype area
- Convenient connections for MPLAB PICKit 3, ICD 3 or REAL ICE for in-circuit programming and debugging
- USB interface for power and PC communication
- 24AA256 Low Power (100nA Sleep, 1.7V Vdd) SPI serial-EEPROM
- Crystal oscillators for main clock and Real-time Clock and Calendar
- Potentiometer (connected to 10-bit A/D, analog input channel)
- Analog output temperature sensor and CTMU based diode temperature sensor
- LEDs for indication
- Optional RS-232 port (not populated)
- Power Options: AAA, CR2032, Energy Harvesting, USB, External, or 9V power supply

Cena

XLP 16-bit Energy Harvesting Kit (#DV164133) je momentálne dostupný za cenu 195,- USD.

Odkazy

[XLP Technology Energy Harvesting Development Solution](#) [Homepage](#)

[XLP 16-Bit Development BOM and Schematics](#)

[XLP 16-Bit Development Kit User's Guide](#)

Distribúcia

Kit je dostupný len cez [Digi-Key](#)