

VA416x0 Development Kit

PEB1-VA41600, PEB1-VA41620, PEB1-VA41630

VORAGO
TECHNOLOGIES

Opening up new possibilities

MCU Development Kit with a single board computer based on a 32-bit ARM® Cortex®-M4 processor manufactured with disruptive HARDSIL® technology and two daughter cards.



OPTIONS

- PEB1-VA41600 (to support VA41600 extreme temperature MCU)
- PEB1-VA41620 (to support VA41620 rad-hard MCU)
- PEB1-VA41630 (to support VA41630 with FRAM rad-hard MCU)

SOFTWARE

- Board Support Package (BSP) via download
 - Example software to demonstrate all peripherals
 - CMSIS compliant
- PEB1 supported by Keil™ MDK-ARM microcontroller software kit
- IAR Systems Embedded Workbench, iSYSTEM winIDEA, GCC compiler and FreeRTOS real-time operating system

APPLICATIONS

- Industrial
- Oil & Gas
- Aerospace
- Space
- Military

KIT FEATURES

- Development Kit comprising of three PCBs and Board Support Package
- MCU Single Board Computer (SBC*)
 - PCB dimensions – 3.15" x 3.3"
 - 256KB boot SPI FRAM
 - 3.3V and 1.5V regulators
 - On-board power distribution and monitoring
 - On-board clock generation (20MHz – 80MHz)
 - On-board crystal oscillator (20MHz)
 - Power supplied through USB connector
 - Three LEDs: 3.3v power, J-Link OB active, 1 for GPIO
 - Connectors with access to GPIO or EBI/Ethernet boards
 - SPI PMOD compatible connector
 - SpaceWire connector (micro DB9)
 - Segger J-Link OB
- Daughter card A - GPIO board
 - PCB dimensions – 5.55" x 4.95"
 - 256KB SPI FRAM
 - I2C-based accelerometer
 - Two CAN transceivers
 - Power supplied through external connectors
 - Connectors with access to MCU board
 - Headers with access to all GPIO and all analog pins
 - Three I2C, two UART, and two SPI PMOD compatible connectors
- Daughter card B - EBI/Ethernet board
 - PCB dimensions – 6.95" x 5.6"
 - 512KB EBI accessible FRAM
 - 512KB EBI accessible SRAM
 - Two CAN transceivers
 - EBI Host port
 - Ethernet transceiver and RJ45 connector
 - Power supplied through external connectors
 - Connectors with access to MCU board
 - Headers with access to 41 GPIO and all analog pins
 - SpaceWire connector (micro DB9)

*SBC plugs into either daughter board.

The PEB1 Kit is intended for room temperature operations only (0°C to 70°C) and is not intended to be used in an oven or getting exposed to radiation.

VA416x0 Development Kit

PEB1-VA41600, PEB1-VA41620, PEB1-VA41630

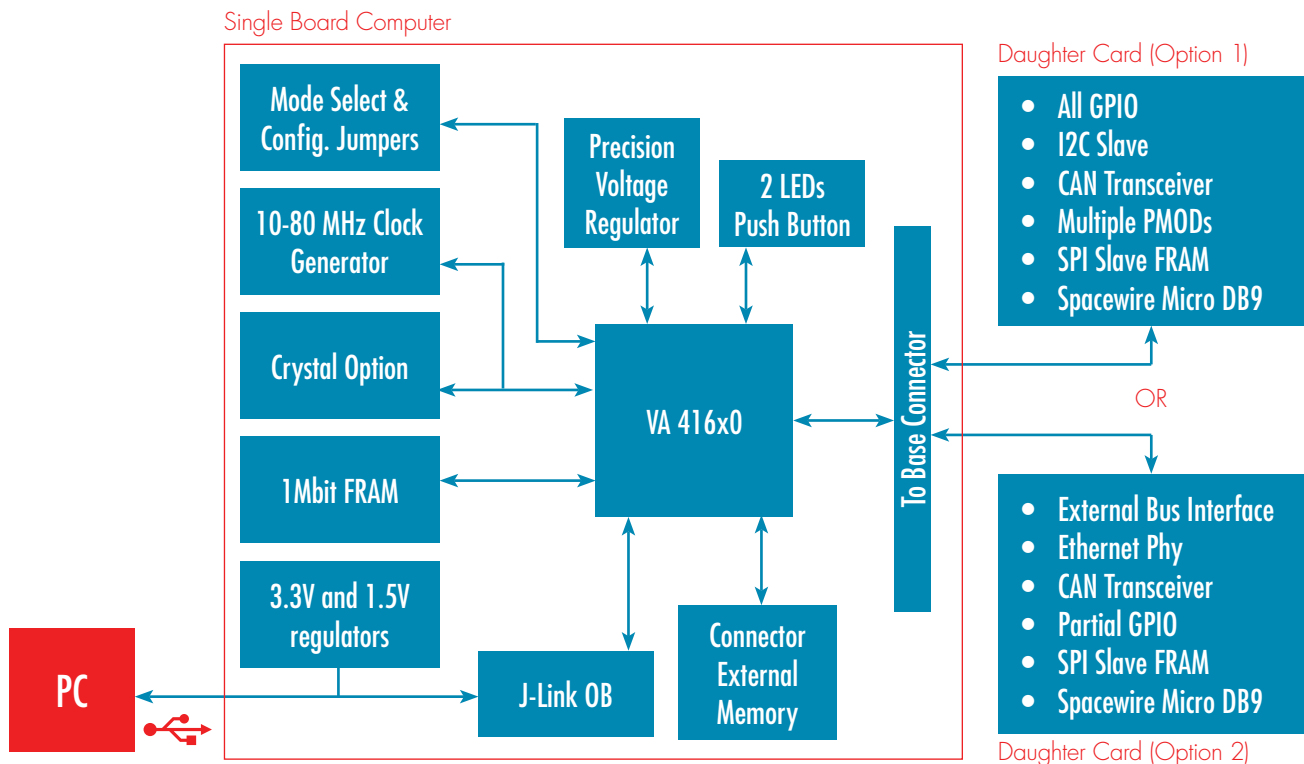
KEY MCU FEATURES

- VA416x0 32-bit ARM® Cortex®-M4 processor**
 - Single Precision Floating Point Unit (FPU)
 - DMA controller (4 channel)
 - Up to 100MHz
 - 64kB on-chip data, 256kB on-chip program SRAM
 - EDAC and memory scrubbing
 - 256kB NVM (VA41630 only)
- 104 configurable GPIO pins
- 3 UART, 3 I2C, 3 SPI, 2 CAN
- Ethernet 10/100 MAC
- Spacewire
- 8-Ch ADC (12-bit, 600ksps)
- 2-Ch DAC (12-bit)
- Temp sensor

Development Board Ordering Information

Description	Part Number	Features
Development Kit	PEB1-VA41600	Supports VA41600 extreme temperature microcontroller
Development Kit	PEB1-VA41620	Supports VA41620 rad-hard microcontroller
Development Kit	PEB1-VA41630	Supports VA41630 with FRAM rad-hard microcontroller

REB1-VA108X0 Development Board Block Diagram



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Development Boards & Kits - ARM category](#):

Click to view products by [Vorago manufacturer](#):

Other Similar products are found below :

[SAFETI-HSK-RM48](#) [PICOHOBBITFL](#) [CC-ACC-MMK-2443](#) [TWR-MC-FRDMKE02Z](#) [EVALSPEAR320CPU](#) [EVB-SCMIMX6SX](#)
[MAX32600-KIT#](#) [TMDX570LS04HDK](#) [TXSD-SV70](#) [OM13080UL](#) [EVAL-ADUC7120QSPZ](#) [OM13082UL](#) [TXSD-SV71](#)
[YGRPEACHNORMAL](#) [OM13076UL](#) [PICODWARFFL](#) [YR8A77450HA02BG](#) [3580](#) [32F3348DISCOVERY](#) [ATTINY1607](#) [CURIOSITY](#)
[NANO](#) [PIC16F15376](#) [CURIOSITY NANO BOARD](#) [PIC18F47Q10](#) [CURIOSITY NANO](#) [VISIONSTK-6ULL V.2.0](#) [80-001428](#) [DEV-17717](#)
[EAK00360](#) [YR0K77210B000BE](#) [RTK7EKA2L1S00001BE](#) [MAX32651-EVKIT#](#) [SLN-VIZN-IOT](#) [USB-202](#) [MULTIFUNCTION DAQ](#)
[DEVICE](#) [USB-205](#) [MULTIFUNCTION DAQ DEVICE](#) [ALLTHINGSTALK](#) [LTE-M](#) [RAPID DEV. KIT](#) [LV18F V6](#) [DEVELOPMENT](#)
[SYSTEM](#) [READY FOR AVR BOARD](#) [READY FOR PIC BOARD](#) [READY FOR PIC \(DIP28\)](#) [EVB-VF522R3](#) [AVRPLC16](#) [V6 PLC](#)
[SYSTEM](#) [MIKROLAB FOR AVR XL](#) [MIKROLAB FOR PIC L](#) [MINI-AT BOARD - 5V](#) [MINI-M4 FOR STELLARIS](#) [MOD-09.Z](#) [BUGGY](#)
[+ CLICKER 2 FOR PIC32MX + BLUETOOT](#) [1410](#) [LETS MAKE PROJECT PROGRAM. RELAY PIC](#) [LETS MAKE - VOICE](#)
[CONTROLLED LIGHTS](#) [LPC-H2294](#) [DSPIC-READY2 BOARD](#)