

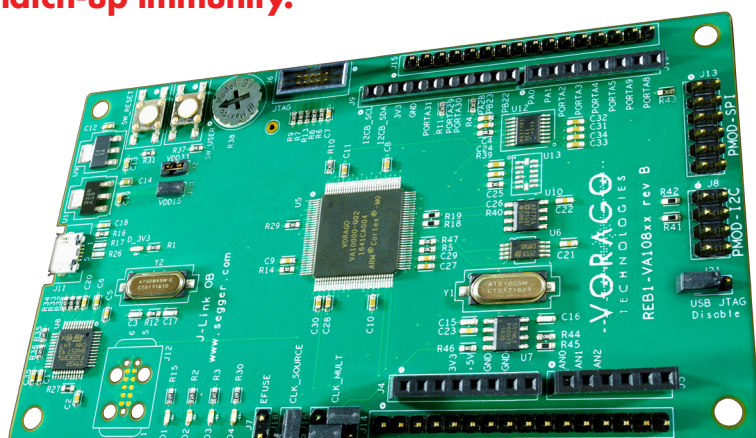
VA108X0 Development Board

REB1-VA10800, REB1-VA10820

VORAGO
TECHNOLOGIES

Opening up new possibilities

MCU Development Board based on a 32-bit ARM® Cortex®-M0 processor and manufactured with the disruptive HARDSIL® technology offering superior operational lifetimes, leakage and latch-up immunity.



OPTIONS

- REB1-VA10800 (to support VA10800 extreme temp. MCU)
- REB1-VA10820 (to support VA10820 rad-hard MCU)

SOFTWARE

- Board Support Package (BSP)
 - Example software to demonstrate all peripherals
 - CMSIS compliant
- REB1 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
- Automotive
- Space
- Medical
- Military

KEY MCU FEATURES

- VA108X0 32-bit ARM® Cortex®-M0 MCU
 - Manufactured with HARDSIL® technology
 - Clock rate up to 50MHz
 - 32KB on-chip data SRAM
 - 128KB on-chip program memory SRAM
 - 24 general purpose counter / timers
 - 56 Dedicated general purpose I/O (GPIO) pins
 - 2 UARTs
 - 3 SPIs (two master / slave, one master only)
 - 2 x I2C
 - On-chip EDAC and Scrub Engine (VA10820 only)

BOARD FEATURES

- Development Board comprising of PCB and Board Support Package
 - PCB dimensions – 2.6" x 4.5"
 - 128KB boot SPI EEPROM
 - 3.3V and 1.5V regulators
 - On-board power distribution and monitoring
 - On-board clock generation (10MHz – 80MHz)
 - I2C-based temperature sensor
 - Power supplied through USB connector
 - Five LEDs: USB power, J-Link OB active, 3 for GPIO
 - Connectors with access to 39 GPIO
 - I2C and SPI PMOD compatible connectors
 - SPI-based 10-bit ADC
 - Segger J-Link OB

The REB1 board is intended for room temperature operation only (0°C to 70°C) and was not intended to be used in an oven.

VA108X0 Development Board

REB1-VA10800, REB1-VA10820

Development Board Ordering Information

Description	Part Number	Features
Development Board	REB1-VA10820	Supports VA10820 Radiation-hardened microcontroller
Development Board	REB1-VA10800	Supports VA10800 Extreme temperature microcontroller

REB1-VA108X0 Development Board Block Diagram

