Extreme Temperature
ARM® Cortex®-M0 Microcontroller
VA10800

VORAGO
TECHNOLOGIES
Opening up new possibilities

32-Bit ARM® Cortex®-M0 Microcontroller manufactured with HARDSIL® technology offering superior operational lifetimes, low leakage performance and latch-up protection at extreme temperatures up to 200°C.
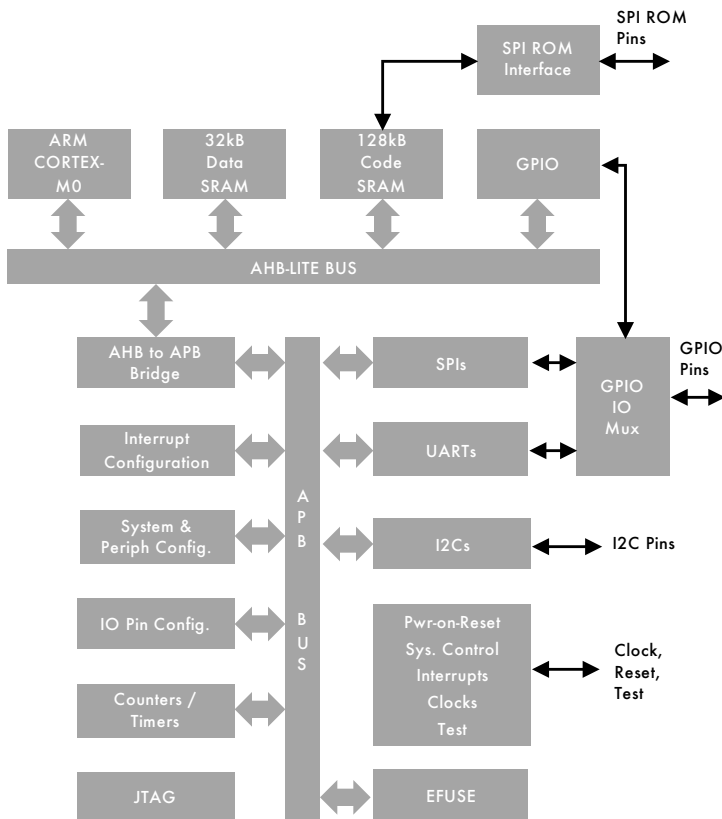
KEY FEATURES

- Manufactured with HARDSIL® technology
- 32-bit ARM® Cortex®-M0 processor
  - JTAG based debug interface
- Operating voltages
  - Core voltage 1.5 +/- 0.15V
  - I/O voltage 3.3 +/- 0.33V
- Clock rate 50MHz
- Memory
  - 32KB on-chip data and 128KB on-chip program memory
  - 1KB Efuse for custom boot and unique ID support
- Peripherals
  - 54 configurable GPIO pins
  - 2 UART interfaces
  - 2 I2C interfaces
  - 3 SPI interfaces (2 master / slave, 1 master)
- Timer System
  - 24 configurable 32-bit counters / timers
  - Input capture, Output compares
  - PWMs, Pulse Counters, Watchdog timer
- Package
  - Plastic or Ceramic 128 pin LQFP (14 x 14mm)
  - Die option available

EXTREME TEMPERATURE RANGE

- –55° to 200°C
  - Up to 1.1 years lifetime at 200°C

SUPPORT

- REB1 development board
- Keil™ MDK-ARM microcontroller software kit

APPLICATIONS

- Industrial
- Oil & Gas
- Medical
- Aerospace
- Automotive

For more information, contact below or visit our web site at www.voragotech.com
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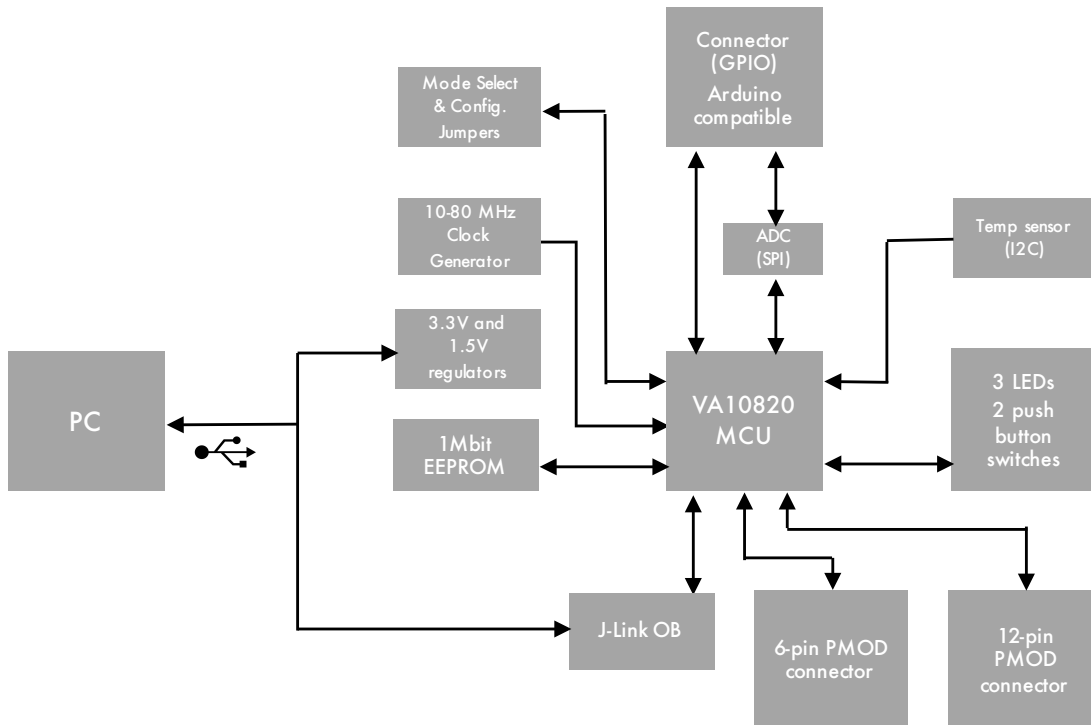
MCU ORDERING INFORMATION

Description	Part number	Environment	Temperature Range	Package
Extreme temperature microcontroller	VA10800-D000003PCA	Extreme temperature	-55° to 200°C	Die
Extreme temperature microcontroller	VA10800-CQ12803ECA	Extreme temperature	-55° to 200°C	Ceramic 128 LQFP
Extreme temperature microcontroller	VA10800-PQ12803PCA	Extreme temperature	-55° to 200°C	Plastic 128 LQFP

DEVELOPMENT BOARD ORDERING INFORMATION

Description	Part number	Features
Development Board	REB1-VA10800	Supported by Keil™ MDK-ARM Microcontroller Software Kit Board Support Package (BSP) includes example software for peripherals Segger J-Link OB

REB1-VA10800 DEVELOPMENT BOARD BLOCK DIAGRAM

For more information, contact below or visit our web site at www.voragotech.com
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October 2016