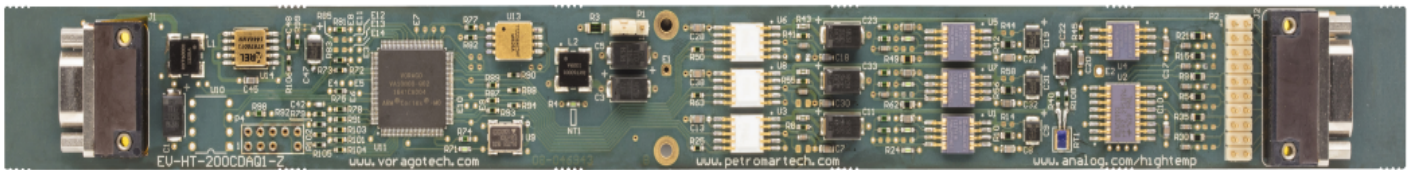


VA10800 High Temperature Data Acquisition Evaluation and Reference Design Kit HT-DAB-1



MCU-based high temperature data acquisition system using 32-bit ARM[®] Cortex[®]-M0 processor. Suitable for rapid prototyping or as a reference design. Specified for 200[°]C operation.



BOARD FEATURES

- Evaluation Board comprising of PCB and Board Support Package
 - All components and PCB rated and tested for 200[°]C operation
 - PCB aspect ratio suitable for downhole vessels
 - PCB dimensions – 1.0" x 11.5"
 - Micro D 15-S and D 21-S connectors
 - Three AD7981 16-bit, 600 kbps ADCs (one of the ADCs is multiplexed with eight input channels)
 - ADG798 multiplexer and ADR225 voltage reference
 - TTL UART communications
 - Boot flash, system clock and power supplies
 - 85dB SINAD using 2.5 V reference with no missing codes
 - ADC conversions down to 2.3 μ S for non-multiplexed channels and 10 μ S for multiplexed channels
 - 16 kbytes conversion result buffer
 - IDC header connector to facilitate easy probing
 - JTAG debug connector for MCU firmware programming

SOFTWARE

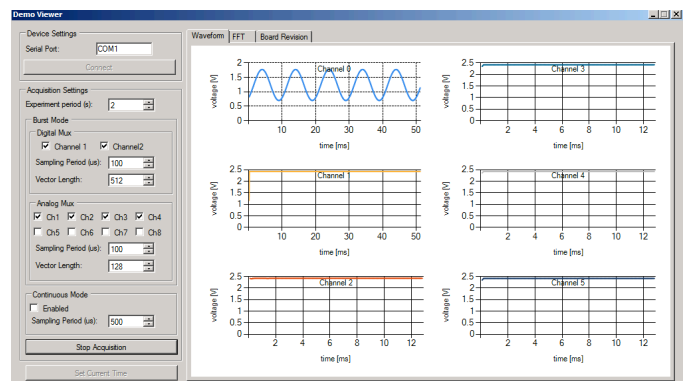
- Board Support Package (BSP) and Viewer software source code available
- VA10800 supported by Keil[™] MDK-ARM microcontroller software kit, IAR Systems Embedded Workbench, iSYSTEM winIDEA.
- Firmware built upon FreeRTOS operating system for simple incorporation of tasks

KEY MCU FEATURES

- VA10800 32-bit ARM[®] Cortex[®]-M0 MCU
 - Manufactured with HARDSLIL[®] 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 x UARTs
 - 3 SPIs (two master / slave, one master only)
 - 2 x I2Cs

REFERENCE DESIGN SUPPORT

- PCB layout files
- VA10800 firmware source code
- PC data logging and display software (open source)
- Schematic diagram
- Download at <http://www.voragotech.com/products/htdab1>



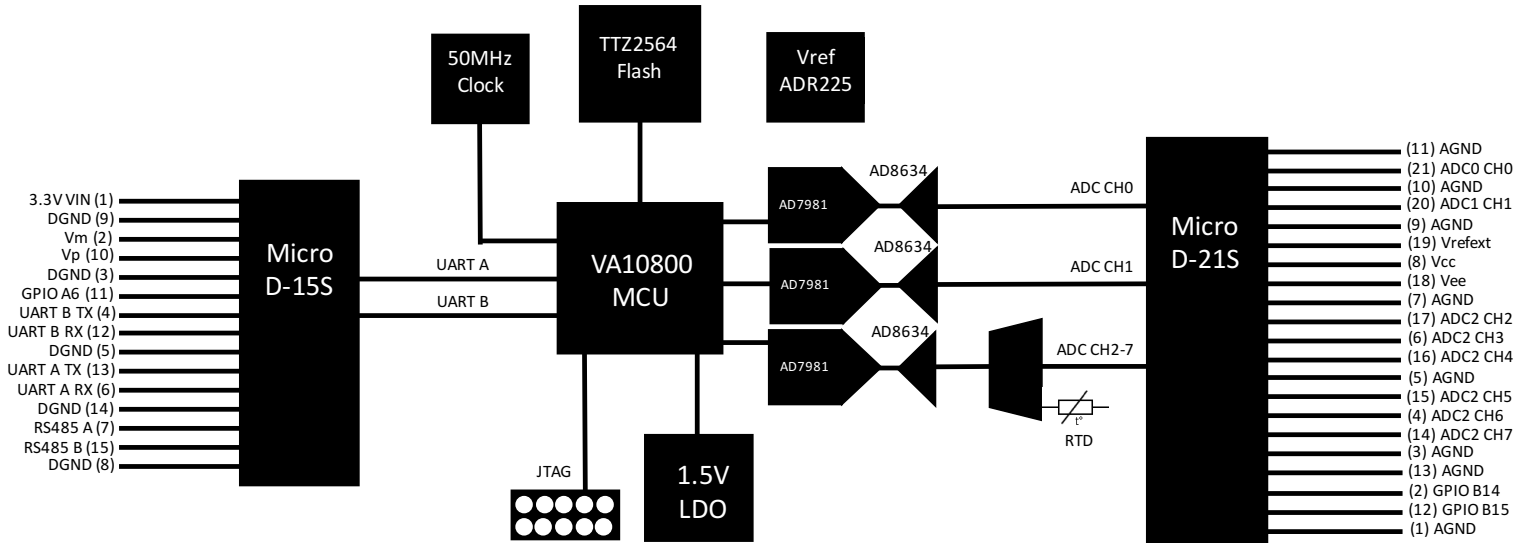
Data Capture and Analysis Software

For more information, contact below or visit our web site at www.voragotech.com
VORAGO Technologies | 1501 S MoPac Expressway, Suite 350, Austin, Texas, 78746 | info@voragotech.com

DEVELOPMENT BOARD ORDERING INFORMATION

Description	Part number	Features
Development Board	HT-DAB-1	VA10800 microcontroller based precision multi-channel analog sensor data acquisition and control system rated to 200 °C

HT-DAB-1 DEVELOPMENT BOARD BLOCK DIAGRAM



HT-DAB-1 POWER CHARACTERISTICS

Description	Voltage	Typical Operating Current (at 25 °C)	Lab Supply Current Limit Setting (Recommended)
Vdd	3.3V ± 10%	35mA (no external pin loading)	100mA
Vcc	5.0V ± 10%	6mA	50mA
Vee	-2.5V ± 10%	4mA	50mA

For more information, contact below or visit our web site at www.voragotech.com
 VORAGO Technologies | 1501 S MoPac Expressway, Suite 350, Austin, Texas, 78746 | info@voragotech.com