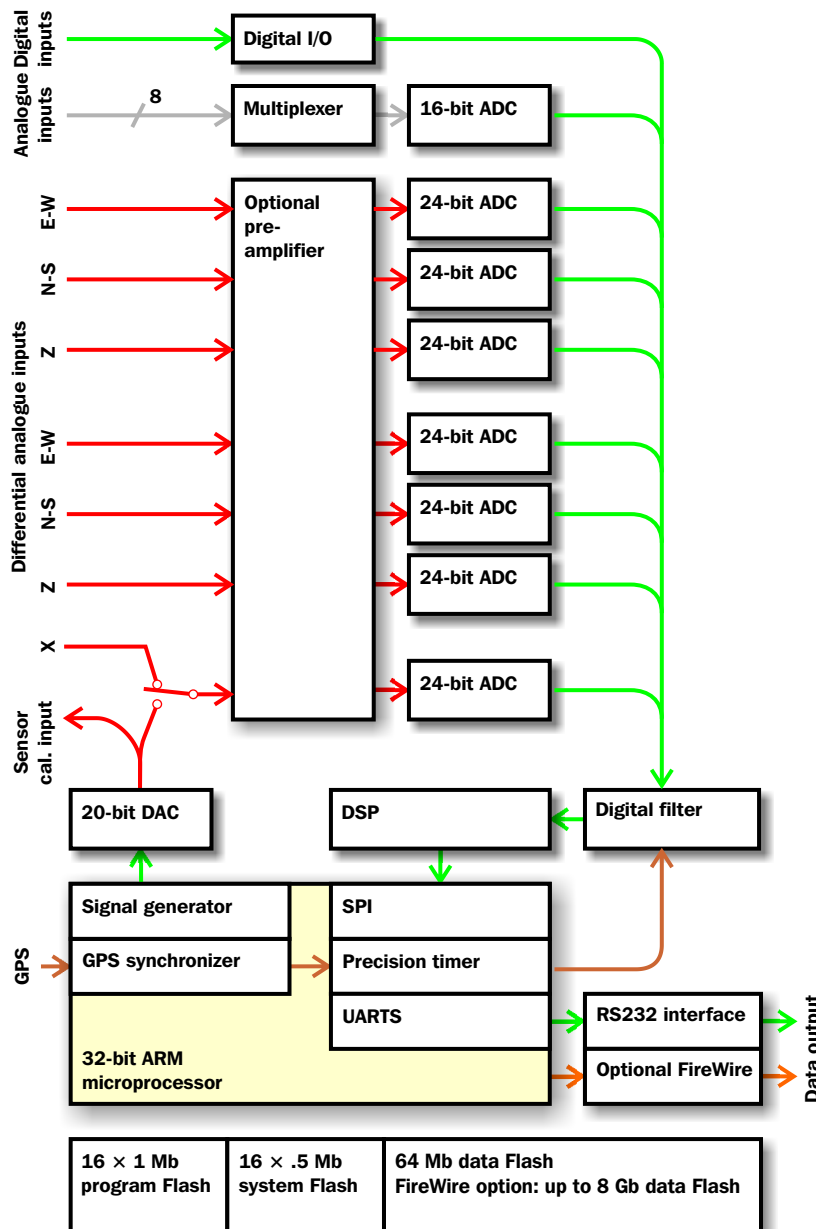


Inside the DM24



The ARM RISC processor inside the DM24 component uses the latest in low-power logic technology to run a real-time multi-tasking operating system using under 650 mW of power.

The DM24 can output up to seven concurrent data streams per instrument at rates from 1000 to 1 samples/second.

A dedicated 20-bit DAC is responsible for generating calibration signals and injecting them into any or all of the seismometer components. The clean calibration signal is also digitized on the seventh channel.

The 20-bit DAC can generate step or sinusoidal signals and PRBS noise, allowing both time- and frequency-domain calibration.

Data is output direct to the on-board EAM for storage and transmission. If desired, users can connect to the digitizer console to retrieve data from Flash storage, configure or control attached instruments.

All data, including additional channels, triggered data, and text status information, is transmitted in tagged streams in GCF format. This efficient format is also used by Guralp EAM and NAM units, as well as Scream! software. The specification of GCF format is freely available from our Web site.