

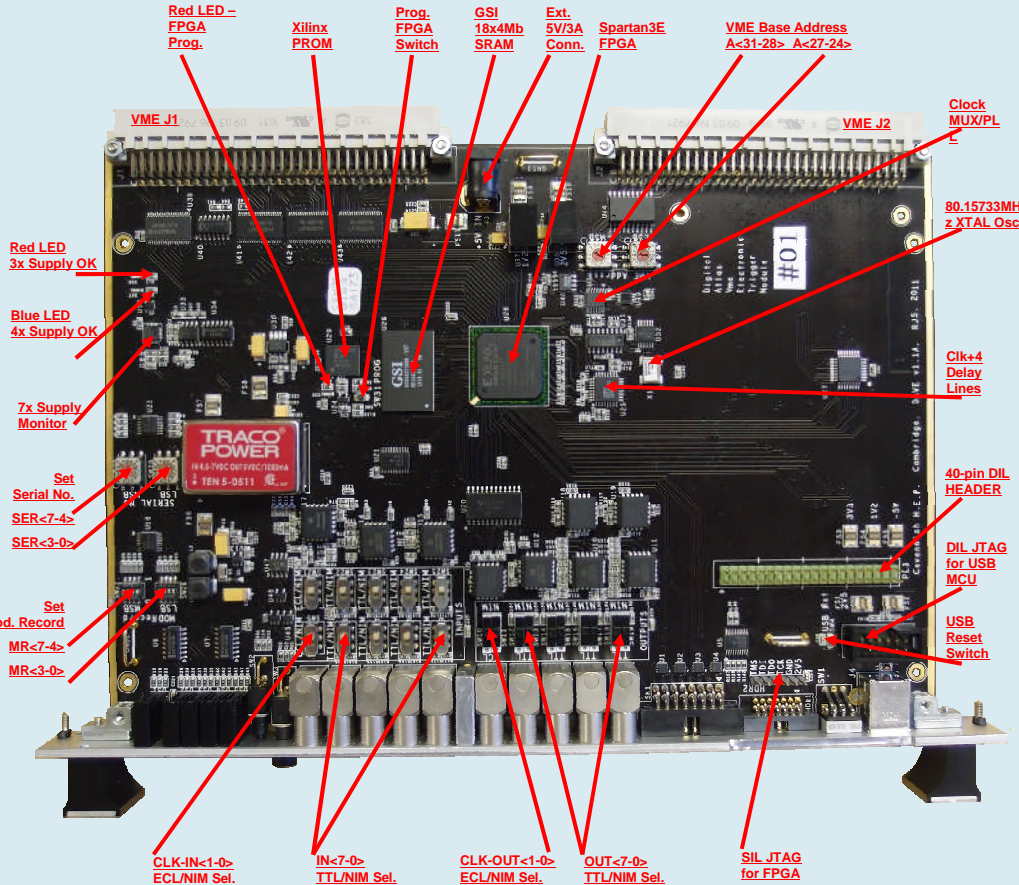
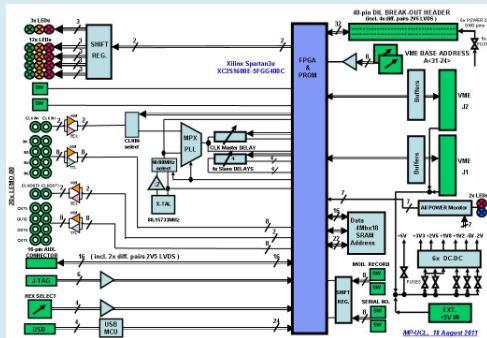
DAVE Module

ATLAS-SCT has developed a new ATLAS trigger card, 'Digital Atlas Vme Electronics' ("DAVE")

Originally designed to replace the NIM electronics used by ATLAS-SCT in USA15 to provide the trigger and veto logic needed in stand-alone physics runs by a 6U VME card, the design quickly grew to incorporate many more generic features.

One significant enhancement was to adopt all ATLAS CTP functions to exactly duplicate ATLAS running conditions, whilst incorporating much generic functionality.

This evolved the DAVE card into a powerful and flexible logic module, potentially useful to all ATLAS subsystems as well as for other non-ATLAS users.



Firmware is developed in a modular fashion allowing code contributions from interested users. Initially the core SCT requirements (vetoing trigger generation around a BCR) will be implemented.

Further development will aim to provide other CTP functionality, with random trigger generator up to 100kHz, simple and complex dead-time, busy gating, ECR, BCR, etc. generation to give exact same conditions in standalone as experienced in combined runs.

