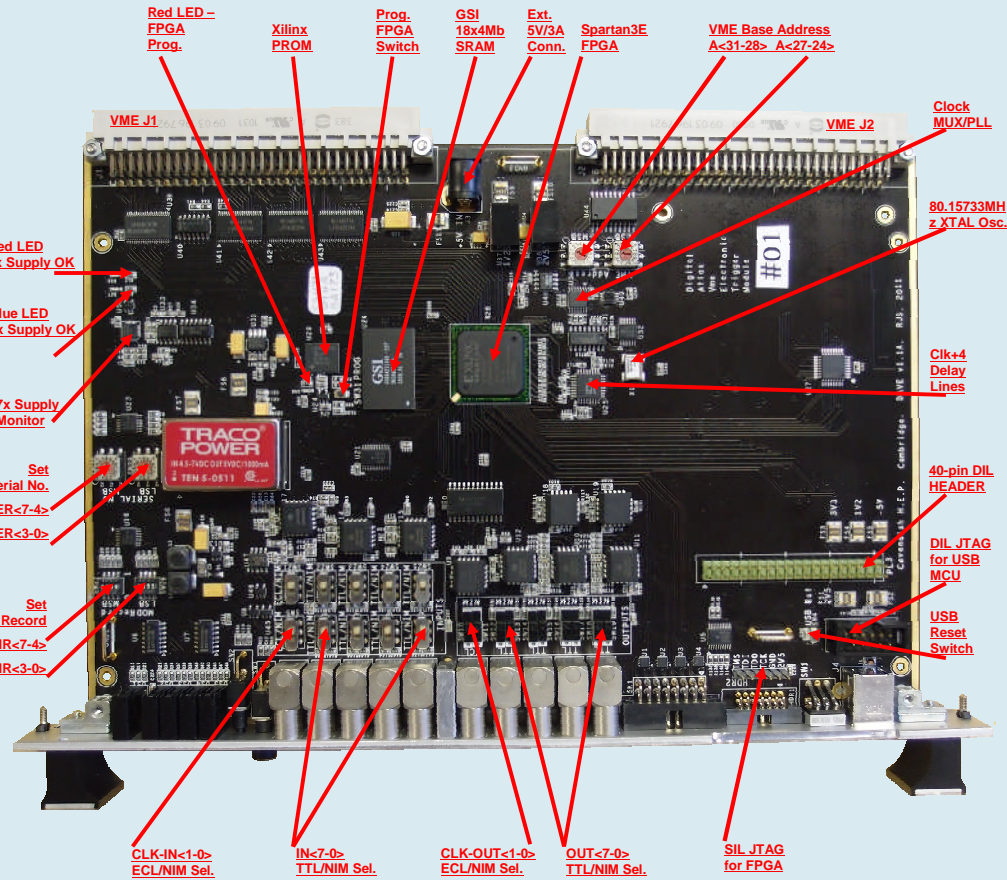
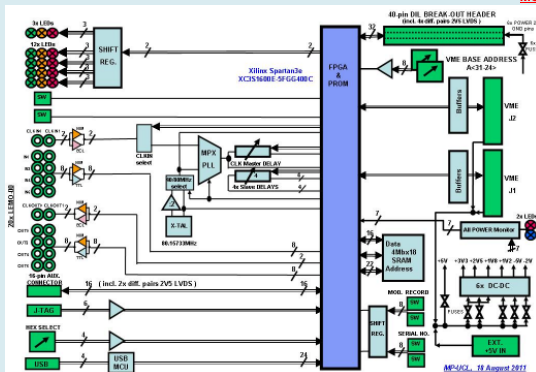


## DAVE Module

- ATLAS-SCT has developed a new ATLAS trigger card, 'Digital Atlas Vme Electronics' ( "DAVE" ) standalone as experienced in combined runs.
- The unit was designed to provide a versatile array of interface and logic resources, including a large FPGA
- Interfaces to both VME bus and USB hosts
- Originally planned as replacement for ATLAS-SCT stand-alone trigger & veto logic NIM module
- Decision to incorporate many more generic features
- Adopted all ATLAS CTP functions to exactly duplicate ATLAS running condition
- Random trigger, simple and complex deadtime, ECR, BCR, etc. are being generated to give exactly the same conditions in standalone running as experienced in combined runs
- DAVE card thus evolved 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

