Delta Tau CPU and Communications Upgrade Plans 2003

Turbo CPU Boards

Piggyback CPU for ISA, PCI, and VME Boards
Presently supports 80 MHz DSP56303 (Opt 5Cx), 100 MHz DSP56309 (Opt 5Dx), 160 MHz DSP56311 (Opt 5Ex, also non-Turbo Opt 5AF, 5CF, 5EF), all in ball-grid array (BGA) package.

Modification will add support for 240 MHz DSP56321 (Opt 5Fx).

UMAC CPU
Presently supports 80 MHz DSP56303 (Opt 5Cx), 100 MHz DSP56309 (Opt 5Dx), both in quad flat pack (QFP) package; RS-232/422 main serial port on 26-pin header, RS-232 auxiliary serial port on 10-pin header, PC/104 bus port, UBUS and stack connectors to axis and I/O boards.

New configuration (not fully backward compatible; will be sold as separate product) will add support for 160 MHz DSP56311 (Opt 5Ex) and 240 MHz DSP56321 (Opt 5Fx). CPU package type will be changed from QFP to BGA. Main serial port will be reduced to RS-232-only on 10-pin header. Stack connectors to axis and I/O boards will be removed. On-board USB2.0 and 100mbps Ethernet will be added. Watchdog timer relay will be added.

UMAC-CPCI CPU
Presently supports 80 MHz DSP56303 (Opt 5Cx), 100 MHz DSP56309 (Opt 5Dx), both in quad flat pack (QFP) package; RS-232 main serial port on DB-9 front connector and through main back field-wiring connector, RS-232 auxiliary serial port through main back field-wiring connector, USB1.1 port through main back field-wiring connector, 10mbps Ethernet through front-panel RJ-45 and main back field-wiring connector.

Modification will add support for 160 MHz DSP56311 (Opt 5Ex) and 240 MHz DSP56321 (Opt 5Fx). CPU package type will be changed from QFP to BGA. USB port will be upgraded to 2.0 (backward compatible); Ethernet port will be upgraded to 100mbps (backward compatible).

QMAC Main Board
Presently supports 80 MHz DSP56303 (Opt 5Cx), 100 MHz DSP56309 (Opt 5Dx), both in quad flat pack (QFP) package; RS-232 main serial port on DB-9 front connector, RS-232 auxiliary serial port through interior connector, USB1.1 port through front-panel connector, 10mbps Ethernet through front-panel RJ-45 connector. USB2.0 option is presently being tested on this board.

No immediate plans for further upgrade of CPU or communications ports.

Communications Boards

UMAC ACC-54E Communications Board
Present released configuration supports USB2.0 (recent addition) and 10 mbps Ethernet.
Modification presently being built adds support for 100 mbps Ethernet (backward compatible).

**PMAC2A-PC/104 ACC-2P Communications Board**

Present released configuration (now in first production build) supports USB2.0 (recent addition) and 10 mbps Ethernet.

No immediate plans for upgrade to 100 mbps Ethernet.