PCI-DSP

B.O.M. @ 100 pcs

\$17 TMS320VC5410APGE16

\$10 PCI2040

\$1 SN74CBTD3861DL (2x)

\$3 TPS767D301PWP

\$1 SN74LVC1G08DBV (2x) CD74ACT163M

\$3 OSC16.384MHz, 5V

\$1 HDR 2x13 (expansion)

Optional

\$1 SN74LVTH16245ADL

\$1 SN74LVC1G07DBV HDR 2x20 (hpi)

Manufacturing

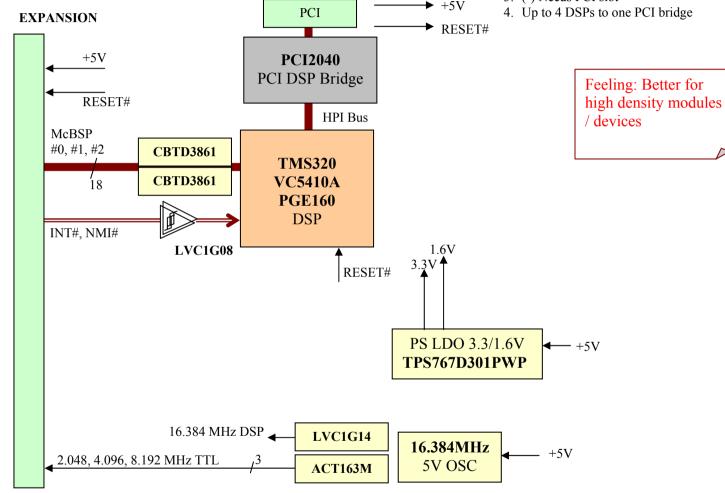
\$14 PCB 60x80 FR4 4-layers

\$13 Assembly

\$65 TOTAL

Conventional PCI-DSP

- (-) Non-standard Linux/Windows kernel mode device drivers
- 2. (+) Available 3 McBSPs (or GPIO)
- 3. (-) Needs PCI slot



USB-DSP

B.O.M. @ 100 pcs

- \$17 TMS320VC5410APGE16
- \$5 FT245BM
- \$1 SN74CBTD3861DL (2x)

EXPANSION

- \$3 TPS767D301PWP
- \$1 TPS382333DBV
- \$2 SN74LVC138ADB SN74LVC1G14DBV SN74LVC1G08DBV (2x) CD74ACT163M
- \$4 M95256WB6 & DIL socket
- \$3 OSC16.384MHz. 5V
- \$1 XTAL 6MHz
- \$1 HDR 2x13 (expansion) HDR 1x5 (usb)

Manufacturing

- \$7 PCB 60x80 FR4 2-layers
- \$13 Assembly

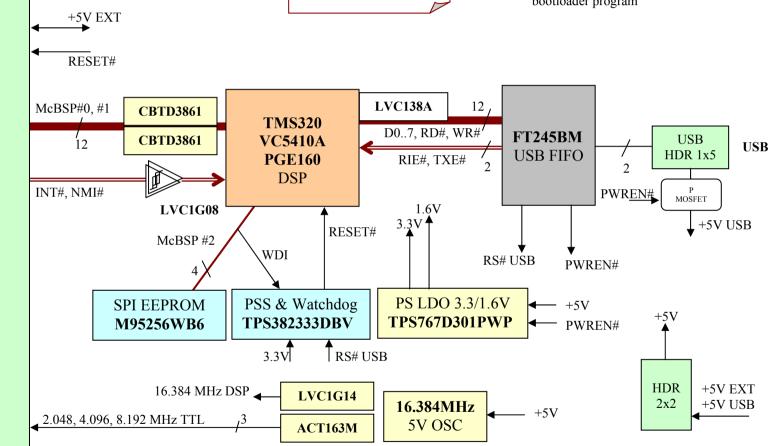
\$58 TOTAL

Note: although USB version seems more complicated than PCI, in fact it is much simpler. No goldfinger, much less wires and simpler PCB, simpler & standard already provided device drivers, cheaper etc.

Feeling: Better for low density (e.g. up to 4 port) devices.

USB-DSP

- 1. (+) VCP: standard USB COM device & wide support (Linux, Windos etc.) See: http://www.ftdichip.com
- 2. (-) Available 2 McBSPs (or GPIO)
- 3. Max. 1 MBy/s transfer rate
- 4. Possible PS from USB (max 2.5W)
- 5. EEPROM contains just DSP monitor & bootloader program



- \$1 SN74LVTH16245ADL
- \$1 SN74LVC1G07DBV HDR 2x20 (hpi)
- Direct connection to PC104-HPI8.
- Used in development.

