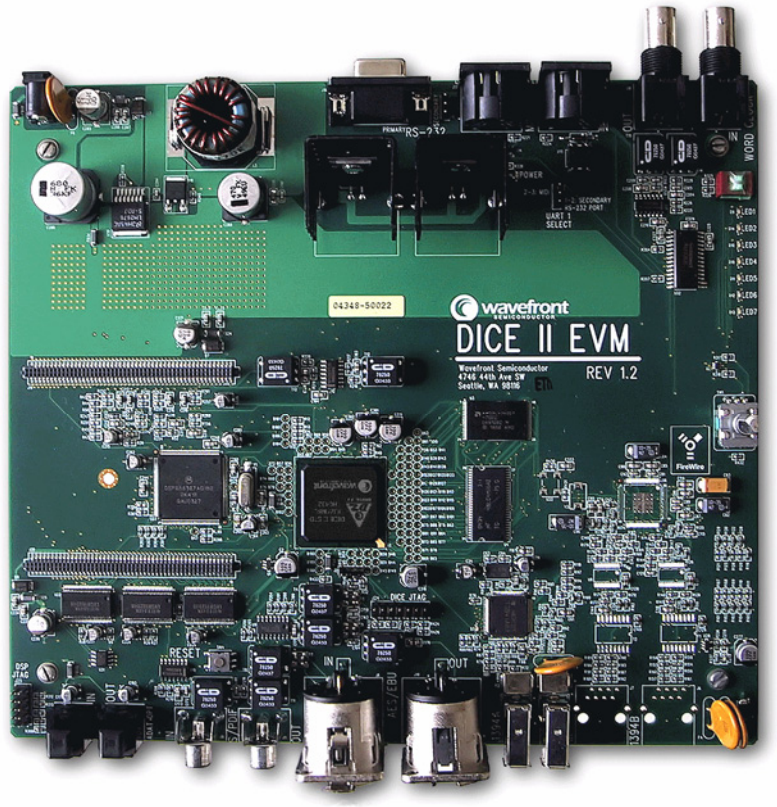
DICE II EVM
Errata



Design

1. The DSP host port should be connected to DICE II pins: D0-D7, but it is connected to DICE II pins: D8-D15. The work around in firmware is to program the DSP area as 16 bits and only use the high byte.
2. R310 and R311 should be 1Kohm, and R315 and R316 should be "not placed". This configures the DSP for "ISA" mode on the host interface. These changes should be made to an EVM before attempting to use the DSP.
3. Pins 13 and 15 of Expansion Connector 2 (J20) are swapped. J20 pin 13 should be I2S_RX2_D0 and J20 pin 15 should be I2S_RX2_D1. This does not affect operation of the EVM, but does affect routing of I2S to optional expansion boards.
4. The crystal attached to the 1394A PHY chip (Y2) is operating approximately 250ppm from its nominal 24.576MHz frequency. The crystal can be pulled to within a few ppm from nominal by changing the load capacitors on this crystal (C63 & C64) to 33pF. Boards shipped from Wavefront after October 1, 2005 have this modification made to them. The modified boards are marked "Rev 1.3X".
5. The REFI pin on DICE II should be pulled high with a 10K resistor to ensure circuit compatibility with a future revision of DICE II (the REFI pin, currently unused in most applications, will be repurposed to a different function on the next version of the DICE II chip). This modification has not been made to DICE EVM boards since they have the first generation DICE II chip on them.

Circuit Board Assembly

1. The 1394B CAT-5 option is not mounted on these boards due to sensitivity problems in the Texas Instruments 1394B PHY silicon. Under controlled conditions the circuit works fine, but in some situations (e.g. more than 5 cable hops, or very long cables) the TI silicon issues bus reset storms. We are waiting for TI to fix this bug in their chip before we support the 1394B option on the EVM Meanwhile, the bill of materials shows the omitted 1394B parts crossed out.