



Chip Errata

DICE II

Mask: 0804

Revision : 1.03

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Errata Number	Errata description	Applies to mask
E1	<p>The Watch Dog (WD) disable feature does not work. When the chip boots the Watch Dog is enabled and it can not be disabled again.</p> <p>The work around is to keep the WD alive by writing 0x5678 to the WD_INT register (0xbf00 0004).</p> <p>The standard firmware installs an interrupt routine to take care of this.</p> <p>This bug poses a problem when working with JTAG debuggers as the WD will reset the target shortly after a breakpoint is reached (~ 8 sec.).</p> <p>This can be circumvented by writing a script which periodically writes the pattern above. Most debugger software packages support such scripting.</p> <p>We recommend the MAJIC-LT probe from Mentor Graphics (EPI Tools), since EPI has developed DICE initialization files. Be sure to specify the CK-ARM14 cable option.</p>	0804
E2	The ADAT interface does not support SMUX-4 (ADAT at 176.4kHz and 192kHz).	0804
E3	The ADAT Receiver interface does not report slip/repeat correctly when operating in SMUX-2 mode. The slip/repeat events should be ignored.	0804
E4	<p>AVS MIDI Receiver idiosyncrasy. The AVSMIDI_STAT register contains a number of status bits for buffer full and empty status. Those bits are 'edge triggered' and are cleared by a read.</p> <p>This also affects the interrupt generation as the Rx interrupt is generated on the buffer becoming non-empty and the Tx interrupts are generated on the buffer becoming empty.</p> <p>For the Rx interrupt handler this means that the interrupt routine must read the buffer until it is empty to assure that a new interrupt will be generated when new MIDI data arrive.</p>	0804
E5	<p>AVS MIDI Receiver bug when receiving MIDI from an Isoc channel with no audio sequences or if the only sequence selected by QSEL is a MIDI sequence.</p> <p>In this case the MIDI data will not be transferred correctly to the ARM buffer system and the stream will not be able to be SYT master for the system.</p> <p>One workaround is to avoid MIDI only streams. If MIDI only streams are required it is possible to receive MPX0 and every other MPX which does not have its predecessor enabled.</p>	0804
E6	<p>The AVS Receivers can not receive no-data packets with payload.</p> <p>The workaround is to avoid using no-data packets with payload.</p> <p>The DICE drivers and newer Class compliant implementations does not use no-data packets with payload.</p>	0804
E7	<p>The AVS Receiver will in some cases not be able to lock to a non-blocking stream.</p> <p>The DICE drivers does not use non-blocking and only few legacy mLAN devices uses this mode of transfer.</p>	0804

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E8	The AVS Receiver requires firmware support to obtain lock to a stream. This is transparently handled by the firmware delivered with the SDK.	0804
E9	The DICE Router does not allow for free routing to AVS transmitters. There are several partial workarounds to this problem and they are implemented in the 'dal' routing mechanism. A thorough description of this bug and possible workarounds can be found in the DICE II User's Guide section 5.1.11 AVS Transmit Exception .	0804
E10	<p>The DSAI Sync outputs are always driven on the positive edge of the bit clock. This errata is a clarification and not a bug. This is only an issue when using Clock and Sync as outputs.</p> <p>Suggested workaround is not to use the clock inversion feature for transmitters. In systems where a different edge is used for driving and sampling the negative edge should be used for sampling.</p>	0804