



DMD2050/DMD2050E

Release AK (4.7)

Software Release Notification

DMD2050/DMD2050E Modem Release AK (4.7)

| Applicability |
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| Bulk release FW/5280AK (4.7), includes bulk firmware and SNMP MIB. |

| Revision History | | |
|------------------|---|------------|
| Rev # | Description | Date |
| Y | 3.5 Initial support for Carrier-in-Carrier (NOTE: Last known F05280 release was U. Release X was being prepared by previous team but never released) | 08/05/2009 |
| AA | 3.7 Finalized implementation for Carrier-in-Carrier (note: 3.6 not used to skip "Z") | 02/11/2010 |
| AB | 3.8 Upgraded Carrier-in-Carrier and LDPC firmware | 04/05/2010 |
| AC | 3.9 Further enhanced Carrier-in-Carrier and LDPC firmware. Also added support for CnC relay bypass card. | 04/28/2010 |
| AD | 4.0 New release of Carrier-in-Carrier FPGA load to support latest CnC boards on the DMD2050. | 10/01/10 |
| AE | 4.1 Improved EbNo monitor display and support Comtech Ethernet Format and PL0000735 baseband card. | 02/17/2011 |
| AF | 4.2 Fix CnC PLL lock detection. Added CnC 1 for 1 switch redundancy mode. New CnC Fpga bin file load. | 08/03/2011 |
| AG | 4.3 Pre-ITA test release. | 10/03/2012 |
| AH | 4.4 EBEM interface including ITA support. | 11/06/2012 |
| AJ | 4.6 Extended lower TPC/LDPC rates. CIDR IP addressing. DMD2050E feature options. | 02/11/2013 |
| AK | 4.7 Corrected problems with Load Configuration File. Corrected problems with EBEM: Encryption at high data rates, Loop Timing, 16APSK 4096k and changed EBEM Turbo 1/2 to Turbo 21/44. EBEM TX LSYNC value for QPSK 1024k to 4096k. | 10/09/2013 |

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Introduction

This release package contains; Corrections for the Load Configuration File and EBEM mode interfaces.

New Features

1. Corrected problem with the Load Configuration File routines. The software was loading the current values from the configuration file but was not kicking-off the routines to program the FPGA registers.
2. Corrected problem with the Loop Timing interface when in EBEM mode. The Loop Timing mode multiplies the “Rx Symbols per Data Bits” ratio by the Rx Data Rate divided by the Tx Data Rate. In EBEM mode the “Rx Symbols per Data Bits” ratio can get quite large and the routine that did the calculation was overflowing a 32 bit integer value.
3. Corrected problem with EBEM 16APSK at 4096k. That particular modulation and exact rate was a border line case for programming the EBEM Lsync registers. The software was checking the rate for greater than 4096k when it should have been checking it for greater than or equal 4096k.
4. Corrected problems with EBEM Encryption at high data rates. The FLEXI_TX codec FPGA load was not correctly managing the FIFO interface to the TRANSEC card.
5. Changed the EBEM “Turbo 1/2” rate description to “Turbo 21/44”.
6. Added Target EsNo and Range EsNo entry fields in Web page interface for EBEM AUPC.
7. Corrected problem with EBEM TX LSYNC value for QPSK 1024k to 4096k. This value needs to be 32 but was being set to 64.

Known Issue(s) In This Release

None