

Freescale Semiconductor Release Note

P2ETYPEI_RN_0_0_0 Jan 22, 2010 Rev. 0

PPP to Ethernet Type I Interworking RAM Package Release 0.0.0

General

This release note reflects differences between the *QUICC Engine*TM *Block Reference Manual with Protocol Interworking*, QEIWRM, Rev 3, and the features which are available for this device using the provided microcode RAM packages. The following release note reveals any exceptions to the features which are specified in this release of the specification. The notes describe any addition to the specification or any missing functionality in comparison to the specification.

The user should follow tightly the instructions specified in the QE_Ucode_Loader file provided in the package in relation to the header files containing the code. These instructions assure proper operation and activation of the right features in the code.

Refer to the *QUICC Engine Microcode Errata* for all known issues related to this and other microcode packages.

This package includes the following core blocks: MLMC PPP, Ethernet, Interworking, IP Reassembly, IEEE Std. 1588TM and IP Header Compression support. Features of these core blocks that are not supported in this package are described in Table 3.





Availability

The package is currently available for the following devices.

Table 1. Package Availability by Device

| Device | Loader file name (.h) |
|-----------------|-----------------------------|
| MPC8360 rev 2.1 | iw_pe_type_e_mpc8360_r2.1.h |
| MPC8568 rev 1.1 | iw_pe_type_e_mpc8568_r1.1.h |

Package Content

The tables below designate the content of this package. The baseline is the *QUICC Engine*TM *Block Reference Manual with Protocol Interworking*, QEIWRM, Rev 3. The tables designate additional features and features which are not supported. For the specification of additional features, which are not described in the *QUICC Engine*TM *Block Reference Manual with Protocol Interworking*, QEIWRM, Rev 3, please contact Freescale support. Contact information may be found at www.freescale.com.

Table 2. New Features (Which are not Described in QEIWRM, Rev 3)

| Feature | Comments |
|---------|----------|
| None | |

Table 3. Removed Features (Described in QEIWRM, Rev 3 but Not Supported)

| Feature | Comments | QEIWRM, Rev 3 |
|--|--|---|
| Header manipulation in termination mode Insert/remove/replace VLAN | REMODER[VTagOP] and REMODER[VNonTagOP] (in RxGPRAM) are not supported. | Section 8.5.3.9, "Rx Ethernet Mode Register (REMODER)" |
| | TAD[VTagOP] and TAD[VNonTagOP] are not supported. | Section 8.6.2.6.5, "Termination Action Descriptor (TAD)" |
| LPM PCD | | Section 30.3.2.4, "Longest Prefix Match (LPM) PCD" |
| Expanded Hash Table | | Section 30.5.3.3.1, "TableLookup_FourWayHa sh PCD" |
| VLAN Specific Header Manipulation Command Descriptor | | Section 31.1.11.2, "VLAN Specific Header Manipulation Command Descriptor" |
| CAM Emulation Lookup Table (CELUT) for LookupKey Size of 2 Bytes | | Section 30.5.3.1.1, "CAM Emulation Lookup Table (CELUT) for LookupKey Size of 2 Bytes" |

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Table 3. Removed Features (Described in QEIWRM, Rev 3 but Not Supported) (continued)

| Feature | Comments | QEIWRM, Rev 3 |
|--|---|---|
| IP Header Compression Over Ethernet Links | | Section 31.1.11.18, "Ethernet IP/UDP Header Decompression Command Descriptor (HDCD)," Section 34.4.1.1.2, "Compression of Frames Transmitted on Ethernet Links," and Section 34.4.2.2, "Decompression of PPPoE Frames Received on Ethernet Links" |
| IP-Only Header Compression | Compression Type 0x02 not supported. | Chapter 34, "IPv4/UDP Header Compression" |
| Hierarchical Scheduler | | Section 8.4.17, "Hierarchical Scheduling Support" |
| PPP Mux | | Section 25.9, "PPP Mux Process" |
| IP fragmentation | Tx Global Parameter RAM TEMODER bit 8 is not supported. | Section 8.5.3.3, "Tx Global Parameter RAM" |

Revision History

Table 4. Revision History for Release 0.0.0

| Release Date: Sept 30, 2009 Revision Register Number: 0xBBE01000 | | |
|---|------------------------|--|
| New Features | None. Initial Release. | |
| Removed Features | None. Initial Release. | |
| Bug Fixes | None. Initial Release. | |



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