



PMC-Sierra

COMET and COMET-QUAD (PM4351, PM4354) Device Driver Release Notes

PM4351 AND PM4354

COMET AND COMET-QUAD DEVICE DRIVER

DEVICE DRIVER RELEASE NOTES

PROPRIETARY AND CONFIDENTIAL

RELEASE

ISSUE 1: JULY 2001

REVISION HISTORY

| Issue No. | Issue Date | Details of Change |
|-----------|-----------------|---|
| 1 | September, 2000 | Document created |
| 2 | July 2001 | Updated file versions and “What’s New” section of Release Notes for release rel-1.0 of the COMET and COMET-QUAD Driver. |

1 ABOUT THIS RELEASE

This is the rel-1.0 release of the PM4351 and PM4354 (COMET and COMET-QUAD) device driver. Rel-1.0 is intended for use with PM4351 Revision G COMET devices and PM4354 Revision C COMET-QUAD devices. The rel-1.0 release is functionally complete and has been tested by PMC-Sierra as described in Section 3 below.

2 WHAT'S INCLUDED IN THIS RELEASE

This rel-1.0 release of the COMET and COMET-QUAD driver includes the following files:

| Directory | Filename | File Version |
|-----------|-------------|--------------|
| /src | cmq_api.c | 1.28 |
| | cmq_diag.c | 1.17 |
| | cmq_frm.c | 1.22 |
| | cmq_hw.c | 1.9 |
| | cmq_inbd.c | 1.18 |
| | cmq_intf.c | 1.31 |
| | cmq_isr.c | 1.24 |
| | cmq_rtos.c | 1.7 |
| | cmq_ser.c | 1.12 |
| | cmq_sig.c | 1.9 |
| | cmq_stats.c | 1.14 |
| | cmq_util.c | 1.29 |
| /inc | cmq_api.h | 1.21 |
| | cmq_defs.h | 1.29 |
| | cmq_err.h | 1.5 |
| | cmq_fns.h | 1.13 |
| | cmq_hw.h | 1.7 |

| Directory | Filename | File Version |
|-----------|------------------------------------|--------------|
| /inc | cmq_rtos.h | 1.7 |
| | cmq_strs.h | 1.35 |
| | cmq_typs.h | 1.5 |
| /example | cmq_app.c | 1.2 |
| | cmq_app.h | 1.2 |
| | cmq_debug.c | 1.2 |
| | cmq_debug.h | 1.2 |
| / | Makefile | 1.4 |
| / | software.lic | n/a |
| / | cmq_relnotes_r2.pdf (this file) | n/a |

Notes:

1. `cmq_app.c`, `cmq_app.h` contain example callback function implementation and example code.
2. `cmq_debug.c`, `cmq_debug.h` contain an example debugging task that reports register accesses to the device.

3 TESTING STATUS OF THIS RELEASE

All COMET and COMET-QUAD device driver Application Programming Interface (API) functions have been tested in-house using the PM4351 and PM4354 on a proprietary PMC-Sierra, Inc. application platform running VxWorks™ RTOS. As of the publication date of this document, there are no known bugs in this release. However, the customer is advised to consult our web site (<http://www.pmc-sierra.com>) for any relevant errata that may have been issued subsequent to the publication of this document.

4 WHAT'S NEW IN THIS RELEASE?

rel-1.0: Production release of the PM4351 and PM4354 device driver.

This release implements the following changes from the beta-1.0 release of the COMET and COMET-QUAD device driver:

- RJAT is now enabled automatically if a COMET-QUAD device is configured for framed T1 as outlined in the COMET-QUAD Data Sheet, Issue 6. The function `cometqLineRxJatCfg` does not allow the user to disable the RJAT when a COMET-QUAD is configured for framed T1.
- RLPS initialization on COMET-QUAD devices includes the series of register writes outlined in the COMET-QUAD Data Sheet, Issue 6, to ensure optimal receiver sensitivity. This register sequence is invoked whenever the RLPS on a COMET-QUAD device is programmed using `cometqInit` or `cometqLineRxAnalogCfg`.
- The jitter attenuator output clock divisor programmed using `cometqLineRxJatCfg` and `cometqLineTxJatCfg` is enforced to be at least 15.
- Configuration of frame pulse inversion using API function `cometqBTIFFrmCfg` can now only be performed when the BTIF frame pulse is configured as a slave.
- Fuse programming using `cometqLineRxAnalogCfg` is now performed on COMET devices only.
- API functions `cometqRxAnalogByp` and `cometqTxAnalogByp` now operate on COMET devices only.
- New API functions, `cometqRDLCRx` and `cometqTDPRTx`, added to receive and transmit HDLC frames using the RDLC and TDPR respectively.
- Bug fixes in the following driver API functions: `cometqTestReg`, `cometqLineRxJatCfg`, `cometqLineTxJatCfg`, `cometqDPR`, `cometqSigTslotTrnkDataCfg`.

5 REPORTING PROBLEMS

Please refer to the revision numbers in the files when reporting problems. For technical support, please contact PMC-Sierra by e-mail at apps@pmc-sierra.com or by telephone at 604-415-4533.

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