

Product Development Software Release Form (Revised)

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Product: 3842 PCMCIA/PCI Primary Firmware
Version: 1.1.0
Classification: Firmware
Intended Distribution: Premier Distribution
Date Submitted: 22 February 2002
Submitted By: PRISM Quality Engineering

Description:

The **3842 PCMCIA/PCI Primary Firmware** provides the minimal set of Host Interface Functions needed to perform a non-genesis mode bootstrap and firmware download capability of an HFA3842-populated PCMCIA or PCI 802.11 NIC.

Purpose:

This release introduces support for small serial flash and addresses an intermittent flash corruption problem with parallel flash primaries, and a problem with large serial flash on radio PE designs.

System Environment:

None

Hardware Supported:

3842 Evaluation Board (0x800A)

AMD parallel flash: PRISM II PCMCIA (0x800B), PRISM II Mini-PCI (0x8012), PCI-bridge (0x8016), PRISM III PCMCIA (0x801A), PRISM III Mini-PCI (0x8021)

SST parallel flash: PRISM II PCMCIA (0x800C), PRISM II Mini-PCI (0x8013), PCI-bridge (0x8017), PRISM III PCMCIA (0x801B), PRISM III Mini-PCI (0x8022)

AT24C08 compatible small serial flash: PRISM II PCMCIA (0x800E), PRISM II Mini-PCI (0x8015), PCI-bridge (0x8019), PRISM III PCMCIA (0x801D), PRISM III Mini-PCI (0x8024)

Software Supported:

none

Files Released:

PF010100.HEX Motorola S-Record File (Primary Firmware) for ID 800A, 800B, 8012, 8016, and 801A, 8021

AF010100.HEX	Motorola S-Record File (RAM-download Primary Firmware) for ID 800A, 800B, 8012, 8016, 801A, 8021
PK010100.HEX	Motorola S-Record File (Primary Firmware) for ID 800C, 8013, 8017, 801B, 8022
AK010100.HEX	Motorola S-Record File (RAM-download Primary Firmware) for ID 800C, 8013, 8017, 801B, 8022
PM010100.HEX	Motorola S-Record File (RAM-download Primary Firmware) for ID 800E, 8015, 8019, 801D, 8024
PRI42RFM.PDF	3842 PCMCIA Primary Firmware release form

Installation Instructions:

3842 PCMCIA Primary Firmware is installed in the HFA3842 PCMCIA or PCI NIC with the FLASH command.

Limitations:

Known bugs or features not implemented are:

1. This firmware does NOT support PCI Power Management.

Release History:

**** 1.1.0 – 8 February 2002 ****

1. This release has the label 'P42V1.1.0' applied on the source tree under Perforce.
2. This release reports a major/minor/variant version of 1.1.0 when the Primary Functions firmware ID RID (RID FD02) is queried. This release reports a build sequence number of 00.
3. Primary supplier compatibility range (RID FD03) has a bottom to top range of [4-4].
4. Build sequence numbers are now 0-127 for releases and 128+ for developer builds.
5. Adds small serial flash support for mini-PCI platforms.
6. Changed the large serial flash primary to be compatible with radio-PE designs.
7. Fixed a bug in the parallel flash primaries which resulted in flash corruption in less than 0.5% of the cases when programming the flash.

**** 1.0.8 – 30 October 2001 ****

1. This release has the label 'P42V1.0.8' applied on the source tree under Perforce.
2. This release reports a major/minor/variant version of 1.0.8 when the Primary Functions firmware ID RID (RID FD02) is queried. This release reports a build sequence number of 00.
3. Primary supplier compatibility range (RID FD03) has a bottom to top range of [4-4].
4. Corrected an error that sometimes caused the firmware to obtain invalid PCI/PCMCIA configuration information during initialization.

**** 1.0.7 – 5 October 2001 ****

1. This release has the label 'P42V1.0.7' applied on the source tree under Perforce.
2. This release reports a major/minor/variant version of 1.0.7 when the Primary Functions firmware ID RID (RID FD02) is queried.
3. Primary supplier compatibility range (RID FD03) has a bottom to top range of [4-4].

4. Changes were made to prevent erroneous data from being transferred over the PCI bus.

Plug Record 408 defines the number of milliseconds to delay going idle after the host has set up a buffer access path. The default is 100ms, the minimum is zero, the maximum is 65,535. This record and the associated code was added to prevent data corruption that can occur over the PCI bus if an access is made when the chip is in an idle state.

Control Store writes are now always enabled. This change was made to prevent data corruption that can occur over the PCI bus if an access is made when the chip is executing from on-chip control store.

**** 1.0.6 – 14 September 2001 ****

1. This release has the label 'PL42V1.0.6' applied on the source tree under Perforce.
2. This release reports a major/minor/variant version of 1.0.6 when the Primary Functions firmware ID RID (RID FD02) is queried.
3. Primary supplier compatibility range (RID FD03) has a bottom to top range of [1-3].
4. Fixed an invalid memory configuration bug that was causing some cards to fail during startup.

**** 1.0.5 – 14 June 2001 ****

1. This release has the label 'P42V1.0.5' applied on the source tree under Perforce.
2. This release reports a major/minor/variant version of 1.0.5 when the Primary Functions firmware ID RID (RID FD02) is queried.
3. Primary supplier compatibility range (RID FD03) has a bottom to top range of [1-3].
4. Fixed PCI configuration plug records 403 and 404 to plug the correct location. (TI# 198)
5. A change was made to cause the mini-PCI board to report to the host OS that PM 1.1 is supported and that the WHQL minimum requirements are met. Specifically, support for PME# is reported for states D0 through D3 and PME# is not supported for D3cold.
6. The "Capabilities List" bit (bit 4) in the PCI Configuration Status register is defaulted to being set signifying to the host extended capabilities are supported (in this case Power Management registers).

**** 1.0.4 – 5 April 2001 ****

1. This release has the label 'P42V1.0.4' applied on the source tree under Perforce.
2. This release reports a major/minor/variant version of 1.0.4 when the Primary Functions firmware ID RID (RID FD02) is queried.
3. Primary supplier compatibility range (RID FD03) has a bottom to top range of [1-3].
4. Corrected an error in large serial flash support.
5. Added the PRISM PCI Interface Configuration PDR (0403) to allow manufacturers to replace the Intersil default values for the PCI Interface Configuration register block. Where the PRISM PCI Identifier PDR (0402) allowed the plugging of only the SID and SVID fields, this PDR will allow the plugging of the entire register block. The preferred method is to use PDR 0402.
6. Added the PRISM PCI PM Configuration PDR (0404) to allow manufacturers to replace the Intersil default values for the PCI Power Management register block. This firmware supports the writing of the PCI Power Management register block, but the firmware does NOT support PCI Power Management itself.

**** 1.0.3 – 20 March 2001 ****

1. This release has the label 'P42V1.0.3' applied on the source tree under Perforce.
2. This release reports a major/minor/variant version of 1.0.3 when the Primary Functions firmware ID RID (RID FD02) is queried.
3. Primary supplier compatibility range (RID FD03) has a bottom to top range of [1-3].
4. Corrected an error in large serial flash support.
5. Added part number (product name) RID FD24.

**** 1.0.2 – 28 February 2001 ****

1. This release has the label 'P42V1.0.2' applied on the source tree under Perforce.
2. This release reports a major/minor/variant version of 1.0.2 when the Primary Functions firmware ID RID (RID FD02) is queried.
3. Primary supplier compatibility range (RID FD03) has a bottom to top range of [1-2].
4. Fixed bug with large serial flash support which would corrupt the CIS.

**** 1.0.1 – 7 February 2001 ****

1. This release has the label 'P42V1.0.1' applied on the source tree under Perforce.
2. This release reports a major/minor/variant version of 1.0.1 when the Primary Functions firmware ID RID (RID FD02) is queried.
3. Primary supplier compatibility range (RID FD03) has a bottom to top range of [1-2].
4. Corrected an error in configuration detection that caused random initialization failures.

**** 1.0.0 – 24 January 2001 ****

1. This release has the label 'P42V1.0.0' applied on the source tree under Perforce.
2. This release reports a major/minor/variant version of 1.0.0 when the Primary Functions firmware ID RID (RID FD02) is queried.
3. Primary supplier compatibility range (RID FD03) has a bottom to top range of [1-2].