

# NG CAPWAP IRAM Package Alpha Release 108\_x\_5

## **General**

This IRAM package of Next Generation CAPWAP includes the following main features: CAPWAP new features on top of the existing Legacy IP offloading features which includes: Coarse Classification (CC), Independent-Mode (IM), Host-Commands (HC), IPv4/6 Fragmentation (IPF), IPv4/6 Reassembly (IPR), IPsec and Header Manipulation (HM).

## **Availability**

The package is currently available for the following devices.

**Table 1. Package Availability by Device**

Device	Version Number	Compiler version	Loader file name (.h .bin)
<a href="#">T1024 rev 1.0</a>	108_4_5	—	t1024_r1.0.h fsl_fman_ucose_t1024_r1.0_108_4_5. bin
<a href="#">B4860 rev 2.0</a> <a href="#">B4860 rev 2.2</a>	108_4_5	—	b4860_r2.0.h b4860_r2.2.h fsl_fman_ucose_b4860_r2.0_108_4_5 .bin fsl_fman_ucose_b4860_r2.2_108_4_5 .bin

**Table 1. Package Availability by Device**

<a href="#">T4240 rev 1.0</a> <a href="#">T4240 rev 2.0</a>	108_4_5	—	t4240_r1.0.h fsl_fman_ucode_t4240_r1.0_108_4_5. bin t4240_r2.0.h fsl_fman_ucode_t4240_r2.0_108_4_5. bin
<a href="#">T2080 rev 1.0</a> <a href="#">T2080 rev 1.1</a>	108_4_5	—	t2080_r1.0.h t2080_r1.1.h fsl_fman_ucode_t2080_r1.0_108_4_5. bin fsl_fman_ucode_t2080_r1.1_108_4_5. bin
<a href="#">LS1043 rev 1.0</a>	108_4_5	—	ls1043_r1.0.h fsl_fman_ucode_ls1043_r1.0_108_4_ 5.bin
<a href="#">T1040 rev 1.0</a> <a href="#">T1040 rev 1.1</a>	108_5_5* (* reduced version w/o IM)	—	t1040_r1.0.h t1040_r1.1.h fsl_fman_ucode_t1040_r1.0_108_5_5. bin fsl_fman_ucode_t1040_r1.1_108_5_5. bin

## Revision History

**Table 2. Revision History for Alpha Release 108.x.5**

Release Date: April 21 2015	
<b>New Features</b>	Next Generation CAPWAP features. For more information refer to specification of FMan controller chapter.
<b>New Features (Not in spec)</b>	Support IPsec manipulation and IP fragmentation on egress OP when frame starts with IP header (no L2) and no parser.
<b>Spec Un-Supported Features</b>	The image for T1040 is not supporting independent mode (IM). The reason for this is the reduced IRAM size of this silicon which is 32K bytes. Assuming user requires in uboot to run IM then for uboot it is required to use other image which supports IM (as IPACC_106_x_14 for example) and only after uboot load this image.
<b>Bug Fixes/CCB</b>	1. Support IP fragmentation when frame starts with IP header and no L2. 2. IPsec Manip for frame w/o L2 was not functional (FD length was incorrect). 3. OPCode 2 was not functional for this package due to previous changes. 4. Soft parser: Handle situation that UDP lite header does not exist and GRE header exists.
<b>Known Issues</b>	None.
<b>Restrictions</b>	Same as IPACC package restrictions. (as IPACC_106_x_15 release notes for example)

**Table 3. Revision History for Alpha Release 108.x.4**

Release Date: March 22 2015	
<b>New Features</b>	Next Generation CAPWAP features. For more information refer to specification of FMan controller chapter.
<b>New Features (Not in spec)</b>	Support no parser in IPsec manipulation on encryption.
<b>Spec Un-Supported Features</b>	The image for T1040 is not supporting independent mode (IM). The reason for this is the reduced IRAM size of this silicon which is 32K bytes. Assuming user requires in uboot to run IM then for uboot it is required to use other image which supports IM (as IPACC_106_x_14 for example) and only after uboot load this image.
<b>Bug Fixes/CCB</b>	None
<b>Known Issues</b>	None.
<b>Restrictions</b>	Same as IPACC package restrictions. (as IPACC_106_x_15 release notes for example)

**Table 4. Revision History for Alpha Release 108.x.3**

Release Date: Feb. 1 2015	
<b>New Features</b>	Next Generation CAPWAP features. For more information refer to specification of FMan controller chapter.
<b>New Features (Not in spec)</b>	HM new command: replace field header command.
<b>Spec Un-Supported Features</b>	The image for T1040 is not supporting independent mode (IM). The reason for this is the reduced IRAM size of this silicon which is 32K bytes. Assuming user requires in uboot to run IM then for uboot it is required to use other image which supports IM (as IPACC_106_x_14 for example) and only after uboot load this image.
<b>Bug Fixes/CCB</b>	HM L3 insert: - IPv6 routing headre in L4 checksum was not correct. - Feature copy TOS was not functional together with checksum calculation. Fixed Errata HM2 (FManV3): HM on OP when input frame is SG and VSPE=1 may result with frame data corruption.
<b>Known Issues</b>	None.
<b>Restrictions</b>	Same as IPACC package restrictions. (as IPACC_106_x_15 release notes for example)

**Table 5. Revision History for Alpha Release 108.x.2**

Release Date: Sep. 17, 2014	
<b>New Features</b>	Next Generation CAPWAP features. For more information refer to specification of FMan controller chapter.
<b>New Features (Not in spec)</b>	None.
<b>Spec Un-Supported Features</b>	The image for T1040 is not supporting independent mode (IM). The reason for this is the reduced IRAM size of this silicon which is 32K bytes. Assuming user requires in uboot to run IM then for uboot it is required to use other image which supports IM (as IPACC_106_x_14 for example) and only after uboot load this image.
<b>Bug Fixes/CCB</b>	None.
<b>Known Issues</b>	None.
<b>Restrictions</b>	Same as IPACC package restrictions. (as IPACC_106_x_14 release notes for example)







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