AXM57104 BSP User Guide

Revision 1.40
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1. Introduction

The AXM57104 is a 4-port TSN Gigabit Ethernet PCI Express network interface card, compliant to PCI Express base spec. v2.1 Gen1, which supports enhanced TSN functions included the timing and synchronization compliant to IEEE 802.1 AS-Rev/AS and IEEE 1588V2, the Credit-Based Shaper (CBS) compliant to IEEE 802.1Qav, the Time-Aware Shaper(TAS) compliant to IEEE 802.1Qbv, and the Per-Stream Filtering and Policing (PSFP) compliant to IEEE 802.1Qci. AXM57104 also supports 32 synchronous I/O pins, one Pulse Per Second (PPS) output, field upgradable via In Application Programming (IAP). Users can use this BSP to evaluate/develop their production that target on ASIX AXM57104 TSN Network Switch PCIe Card,

2. Directory Information

Directory	Description
Application	AXM57104 application software components
Document	Reference user manual and brief
Driver	AXM57104 Linux driver source
FPGA	AXM57104 FPGA code
AXM57104 BSP User Guide	Board Support Package user guide for AXM57104

3. Application

File Name	Description
ASIX_demo	ASIX's demonstration for Qbv / Qav
AXM57104_Config_Reg	AXM57104 register configuration tool
AXM57104_FPGA_Upgrade	FPGA code upgrading tool
AXM57104_Ptp4l	802.1AS for bridge architecture
AXM57104_Qav_Config	802.1 Qav configuration tool
AXM57104_Qbv_Config	802.1 Qbv configuration tool
AXM57104_RSTP	Rapid spanning tree tool
AXM57104_Service	Middleware of AXM57104
AXM57104_Web_Server	Web base GUI for user
BootUp	Service for initial AXM57104 while boot
Netconf	Network configuration tool

4. Document

File Name	Description
AXM57104 Product Brief	Product brief of AXM57104
AXM57104 User Guide	Reference User guide of AXM57104

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5. Driver

File Name	Description
AXM57104 Linux Driver	PCIe based network adapter driver

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7. Revision History

Revision	Date	Description
V1.00	2020/08/10	Initial release
V1.10	2021/10/07	1. Updated ASIX Demo v102 2. Updated AXM57104 Ptp4l v200 3. Updated AXM57104 Web Server v100 4. Updated BootUp 5. Updated AXM57104 UserGuide v101
V1.20	2021/11/01	1. Updated AXM57104 Service v103
V1.30	2021/11/17	1. Updated AXM57104 FPGA Upgrade v101 2. Updated AXM57104 Web Server v101 3. Updated AXM57104 UserGuide v102 4. Added FPGA code folder
V1.40	2021/12/16	1. Updated AXM57104 Linux Driver v108 2. Updated AXM57104 Service v104

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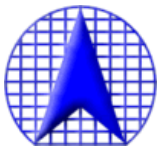

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