AM68, AM69
8.x, 9.x, 10.x Software Offering

09 Dec 2023

For further details on the software roadmap please contact your local TI representative.

For changes vs previous version, see Revision History slide at end of PPT

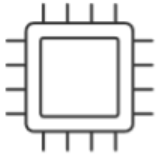
Agenda

- Software Platform Overview
- AM68, AM69 Software Overview
  - Development Resources
  - Processor SDK Linux / Firmware Builder
  - Software architecture block diagrams
- Processor SDK Support

- Roadmap
  - AM69 / AM69A (J784S4)
  - AM68 / AM68A (J721S2)

AM68, 69 Software Overview

Jacinto™ | AM68/69 Development Resources



- SoC
  - AM68A: AM68A,
  - AM69A: AM69A
  - AM57x: AM5749, AM5748 , AM5746, AM5729, AM5728, AM5726, AM5718-HIREL, AM5718, AM5716, AM5708, AM5706

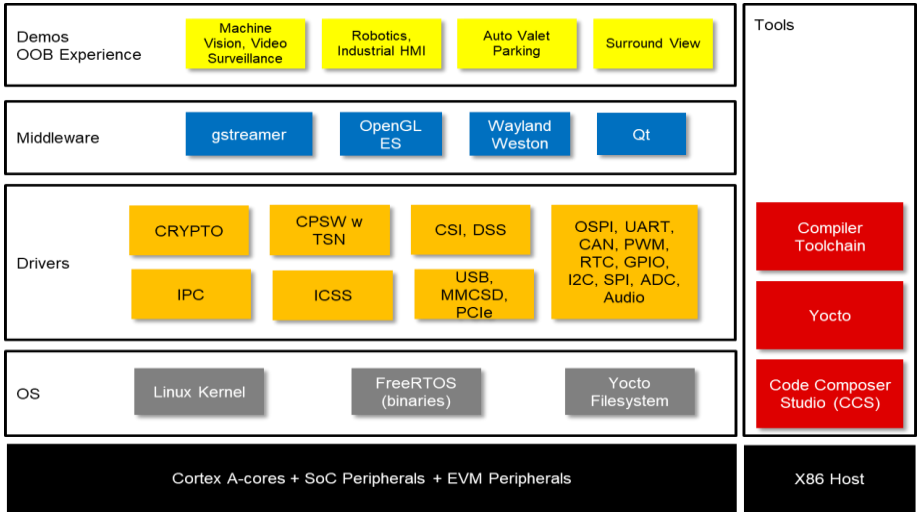
- Software
  - AM57x: PROCESSOR-SDK-AM57X
  - AM68A: PROCESSOR-SDK-AM68A
  - AM69A: PROCESSOR-SDK-AM69A
  - AM68: PROCESSOR-SDK-AM68
  - AM69: PROCESSOR-SDK-AM69

- Evaluation modules
  - AM68: SK-AM68
  - AM69: SK-AM69
  - AM57x: TMDSEVM572X, TMDXIDK5728, TMDXIDK5718, TMDSIDK574, TMDSIDK572

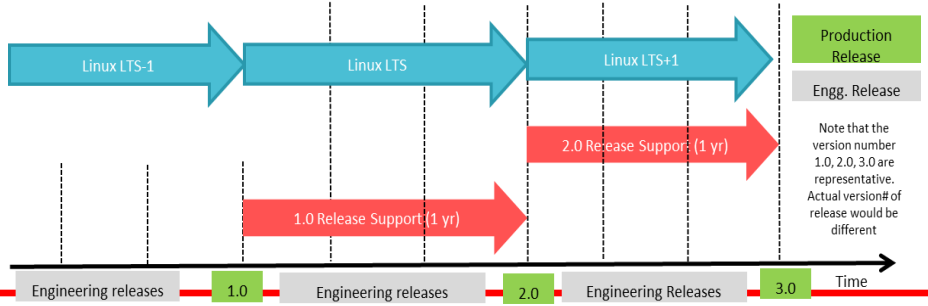
- Trainings (SoC and software)
  - https://training.ti.com/jacinto7
  - https://training.ti.com/am57x-sitara-processors-training-series
  - Analytics Academy: Link, Link
  - Robotics Academy: Link
  - AM57 Academy: Link

Foundational Software | Processor SDK Linux

- Common software across for all TI Linux enabled devices.
- Speed up application development with Production quality SW.
- Yearly migration to community LTS. SDK based on Mainline kernel and U-Boot.
- Complete documentation, libraries, benchmarks, utilities and examples
- Frequent and regular release cadence, providing continuous integration and early availability.

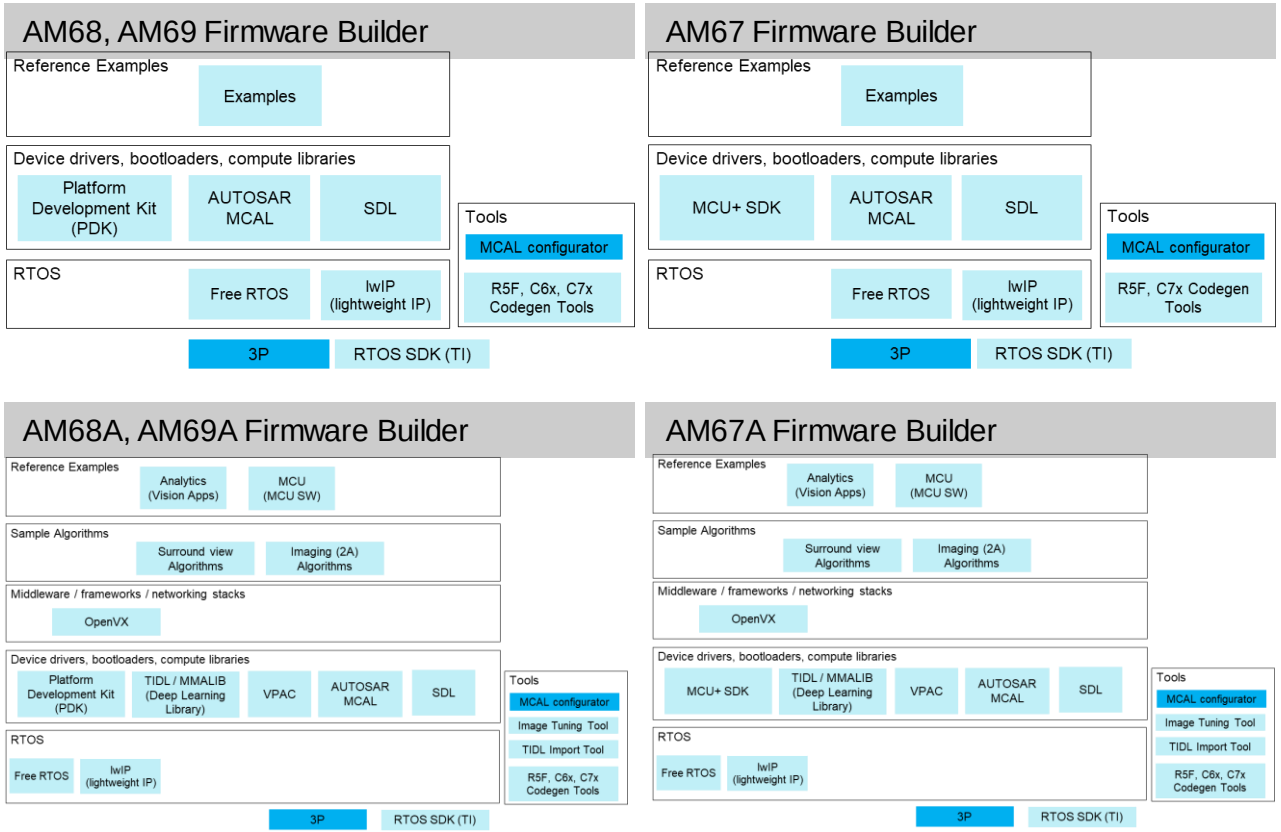


Provided at no charge & directly supported by TI



Foundational Software | Firmware Builder

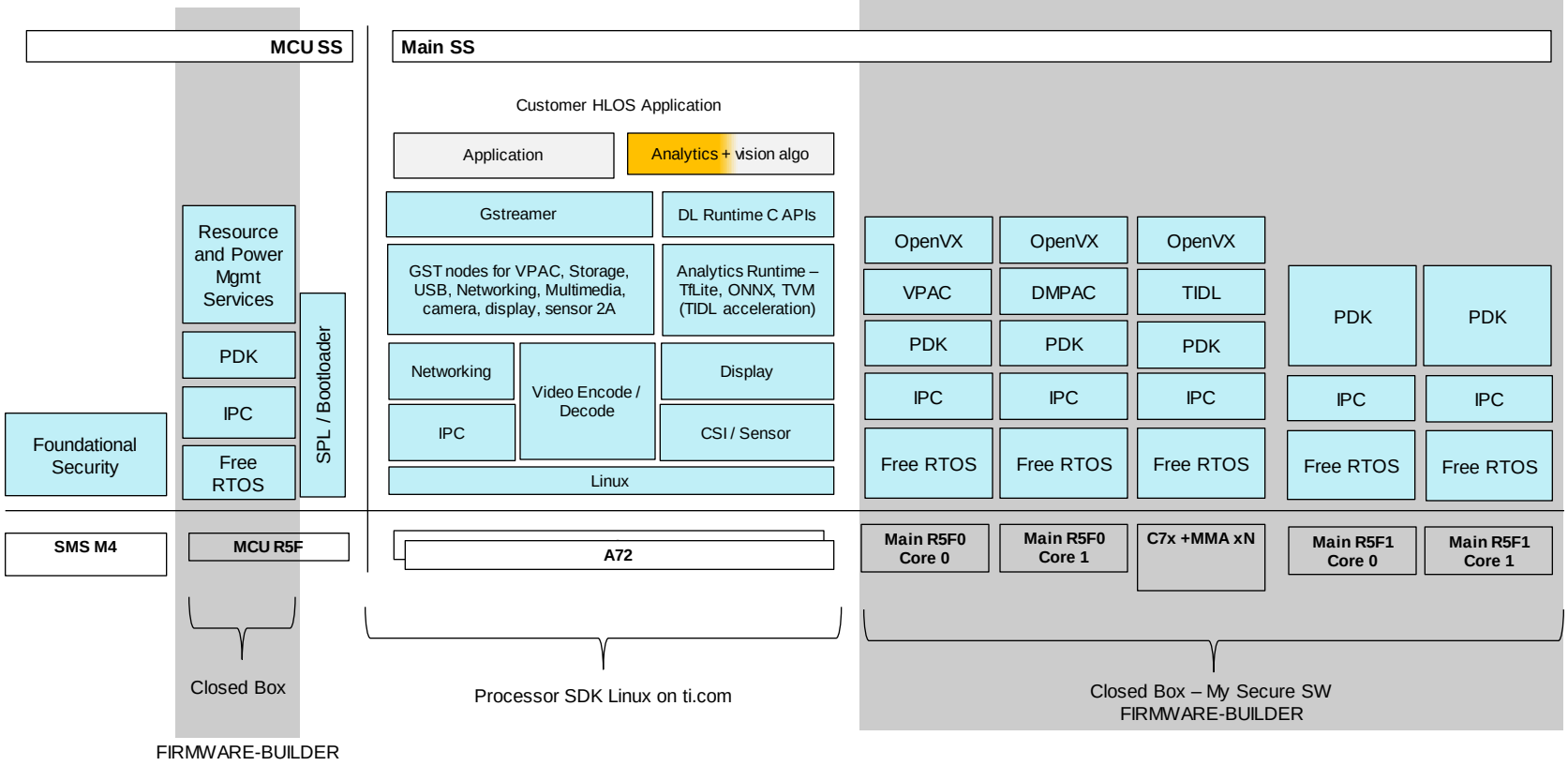
- Sources for all DSP and auxiliary CPU SW development
- Real-time OS kernel, scheduling, memory management and utilities
- DSP SW enables deep learning and computer vision
- Works seamlessly with Processor SDK Linux.



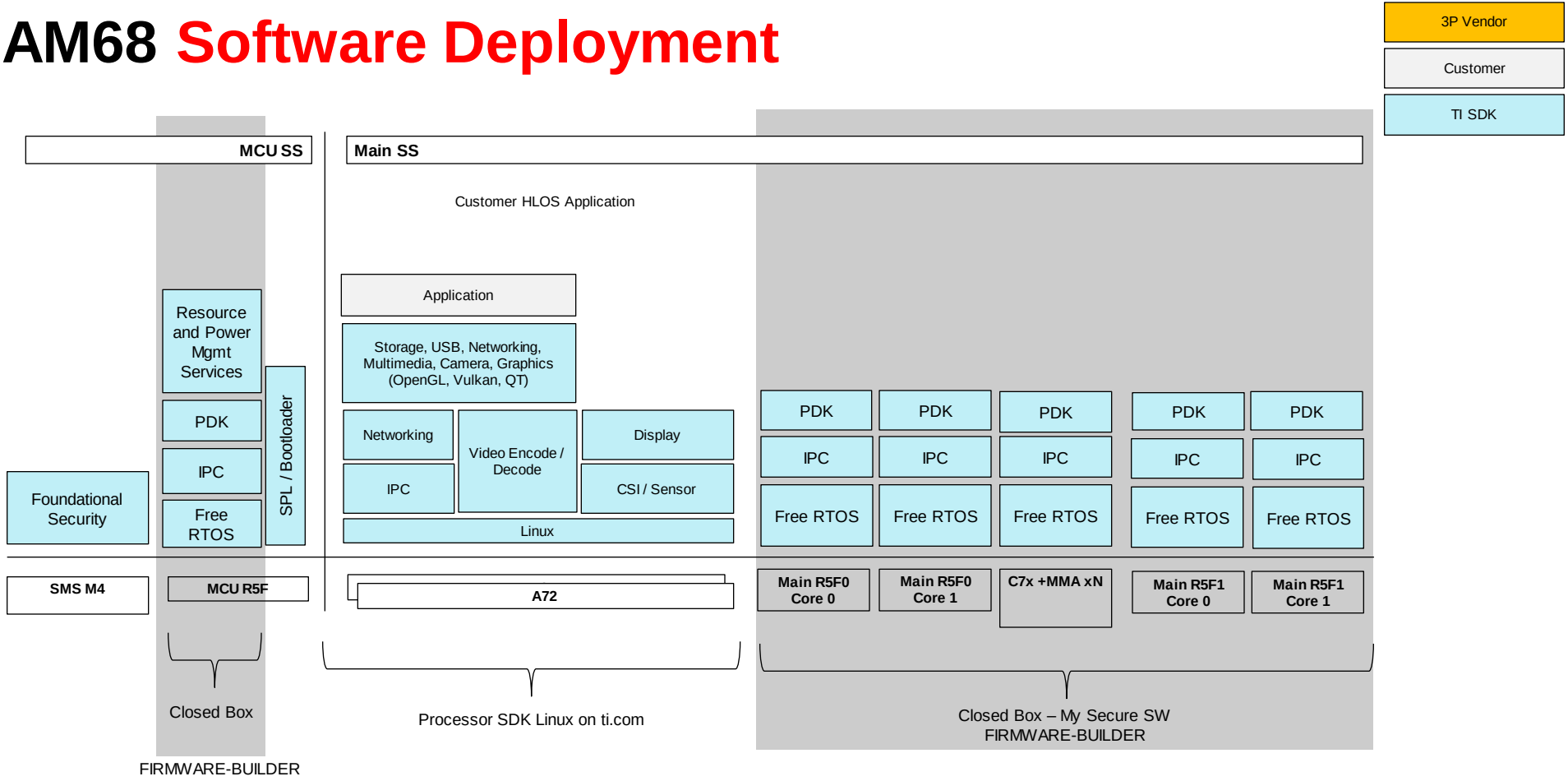
TI Provided components at no charge & directly supported by TI

AM68A Software Deployment

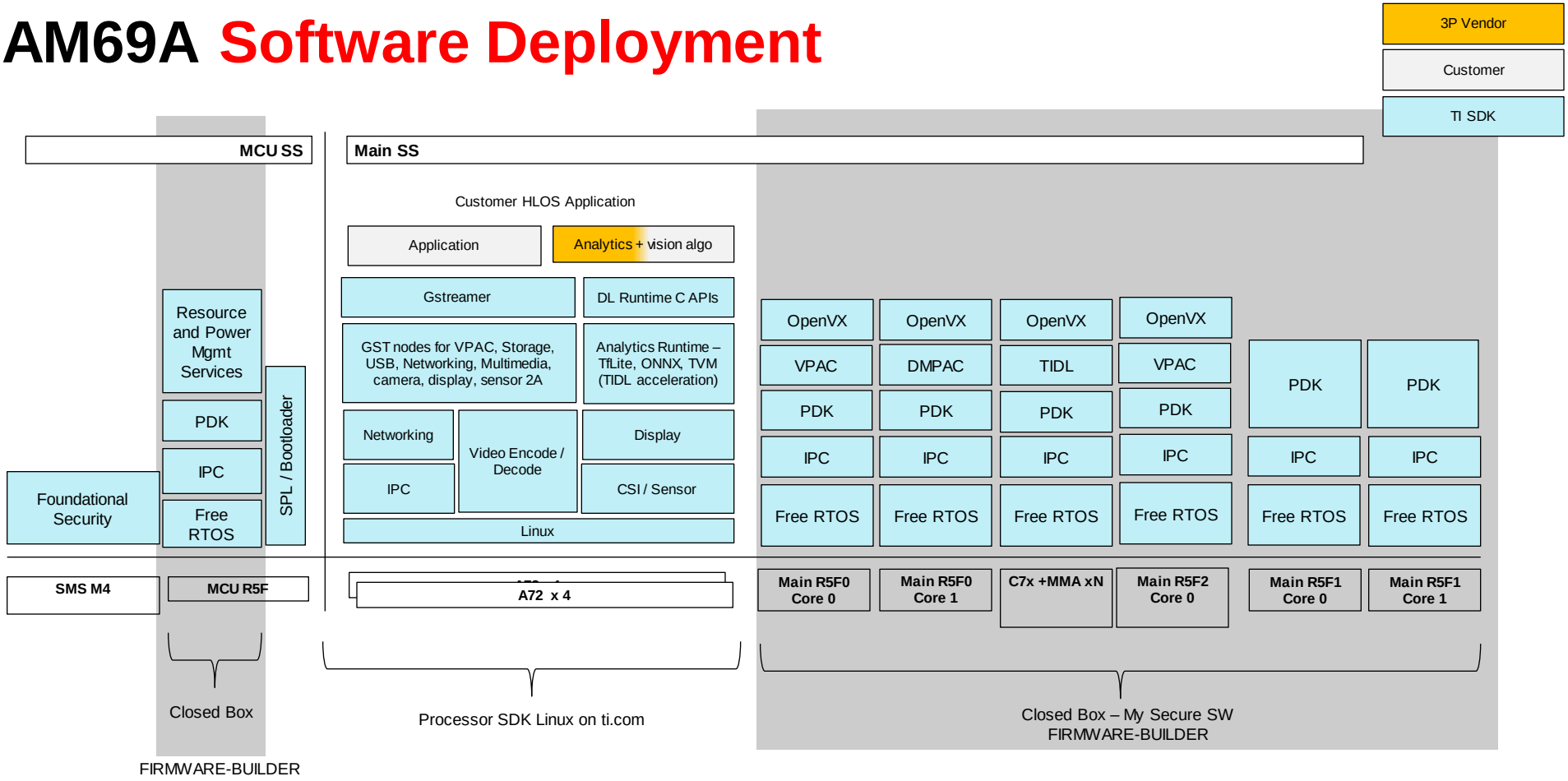
3P Vendor
Customer
TI SDK



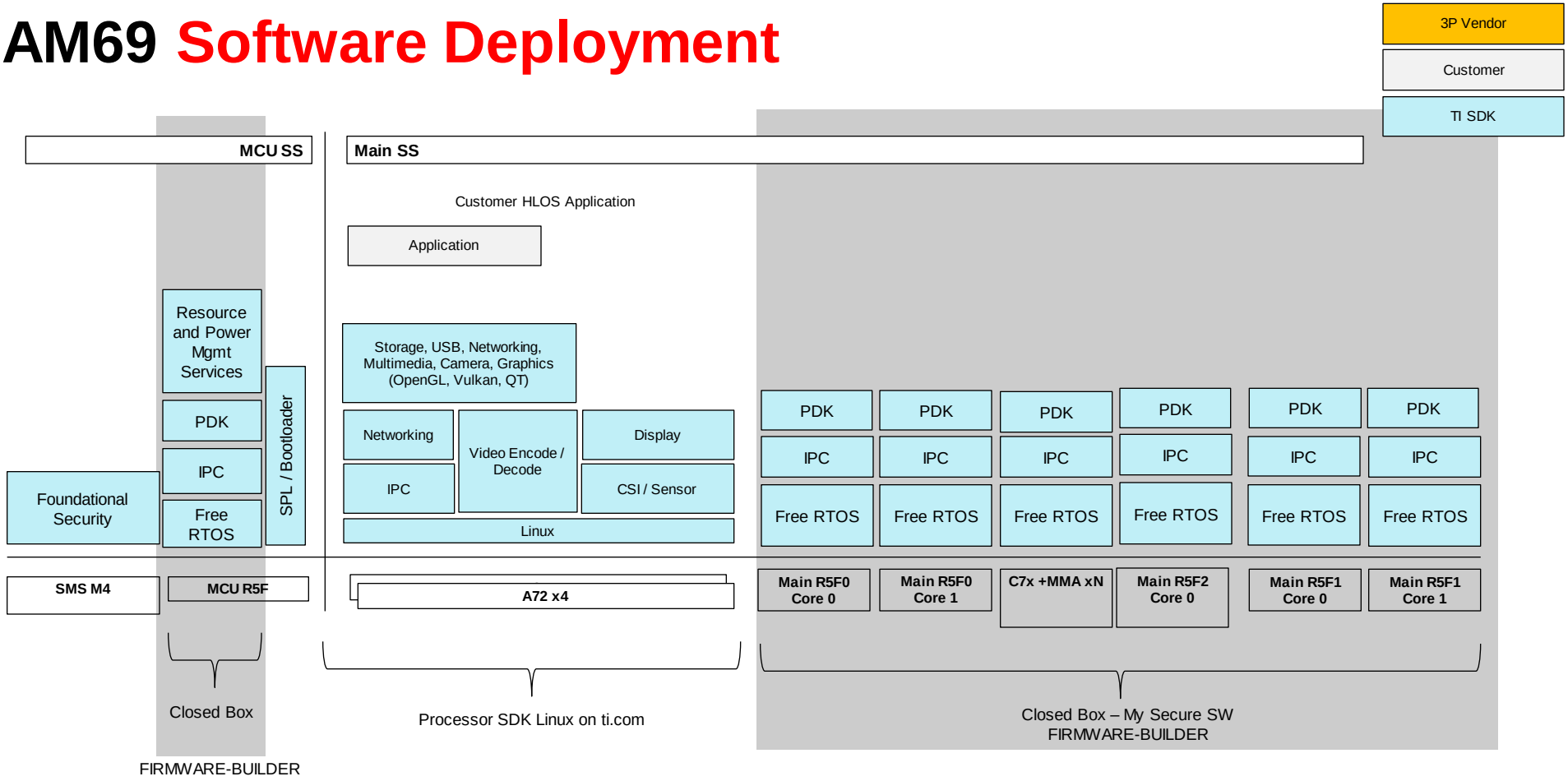
AM68 Software Deployment



AM69A Software Deployment



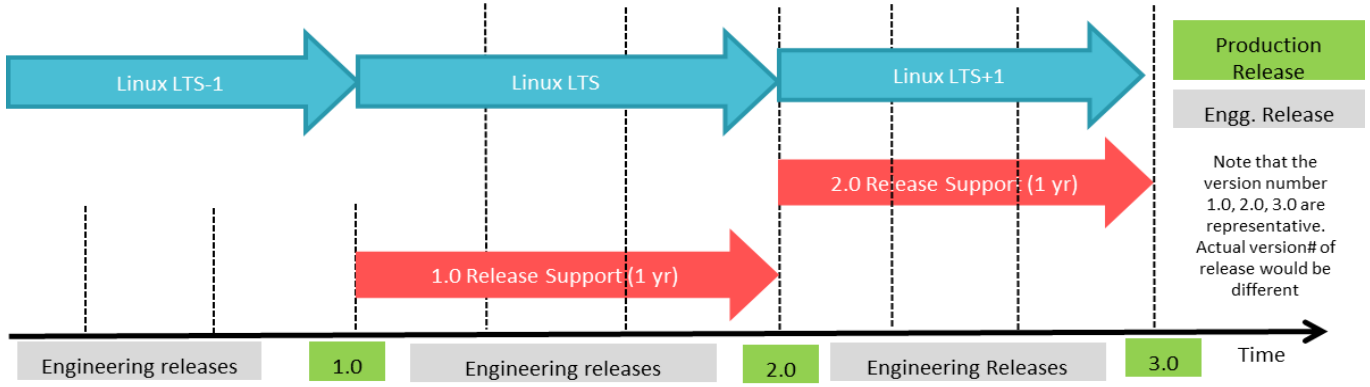
AM69 Software Deployment



Processor SDK Support

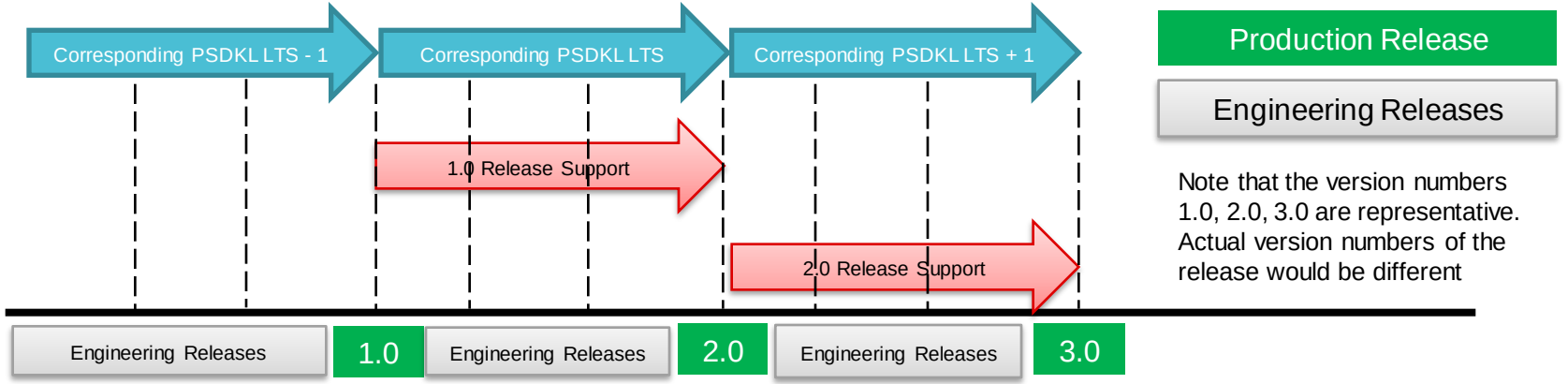
Processor SDK Linux Release and Support timeline

1. *TI uses LTS kernels which are supported by Community for 4-6 years.*
2. *TI supports a given LTS version for 1 year.*
3. *TI migrates to the new LTS release every 1 year. (Exception is 2022)*
4. *TI is focussed on quality upstream support for its devices so customers can get maximum benefit of community support for LTS kernels.*
5. *TI provides 3 releases per year for a given LTS version.*
6. *TI SDK Software is provided "as-is". Entire TI SDK is $0 royalty. It's FREE.*
7. *TI SDK Software licensing is included in the Manifest files of each of the SDKs Release Notes*



Firmware Builder Release and Support timeline

1. *TI provides 3 releases per year in synchronization with Processor SDK Linux.*
2. *TI will base its SDK with the latest compiler LTS version, TI will migrate to latest LTS compiler version on a yearly basis*
   1. *ARM Clang LTS happens 2Q of the year*
   2. *C7x, C6x LTS happens 1Q of the year*
3. *TI provides support for a given SDK release for 1 year.*
4. *TI SDK Software is provided "as-is". Entire TI SDK is $0 royalty. It's FREE.*
5. *TI SDK Software licensing is included in the Manifest files of each of the SDKs Release Notes*



PSDKL, Firmware Builder Support Strategy

1. *Support includes bug fixes, new feature requests and Q&A support via E2E.*
2. *For Bug Fixes:*
    1. *New Bug fixes are always available on the latest SDK release*
    2. *Porting of bugfixes will be done by the customer.*
        1. *TI would support the customer for queries.*
        2. *Backports will not be available at the time of the future SDK release.*

3. *For New Feature Requests:*
    1. *Implemented new feature requests shall always be available on the latest SDK release. Backports will not be available at the time of the future SDK release.*
    2. *Backporting of new features will be done by the customers. TI will support for queries.*
    3. *Back porting of new features will not be supported prior to SDK 8.2 (stable release with FreeRTOS and TI ARM CLANG support).*

4. *For Q&A:*
    1. *TI shall support Q&A on the Software and Hardware till the end of life of the product.*
    2. *Customer will need to provide a testcase/scenario to recreate the issue on TI EVM for TI to support.*
        1. *Since TI delivery is usually modified on the customer side, this helps to isolate whether this is base SDK issue or not.*

SDK Release Schedule

ROADMAP details in next slides arranged as,

- AM69, AM69A (J784S4)
  - Features AVAILABLE NOW
  - Detailed ROADMAP
- AM68, AM68A (J721S2)
  - Features AVAILABLE NOW
  - Detailed ROADMAP

Release Version	Date	Platform
v8.6	15 MAR 2023	AM68A, AM69A
v9.0	30 JUL 2023	AM68, AM69, AM68A, AM69A
v9.1	30 NOV 2023	AM68, AM69, AM68A, AM69A
v9.2	15 MAR 2024	AM68, AM69, AM68A, AM69A
Future Releases	Coming in 2024	Stay tuned

J784S4, AM69, AM69A SW Road map

J784S4 – Future SW Roadmap – Summary

	Processor SDK EA 8.2.1	Processor SDK EA 8.2.2	Processor SDK 8.5	Processor SDK 8.6	Processor SDK 9.0
	22 JUL 2022	22 AUG 2022	20 DEC 2022	15 MAR 2023	30 JUL 2023
LINUX	1. SPL/U-Boot – basic boot modes 2. Linux kernel v5.10 LTS 3. Accelerators – GPU, Codec, CPSW2G/9g (virtual) 4. Peripheral drivers – PCIe, USB		1. Secure Boot (HS-SE) 2. Gstreamer – Codec 3. CPSW native Linux 4. GPU documentation + additional testing	1. HS-FS Support 2. SPI Master/Slave 3. AM69A Low Cost Starterkit support	1. LTS6.1, GCC11, Kirkstone migration 2. QSPI boot 3. PCIe advanced features 4. Codec advanced features

AM69A | Edge AI SDK(1/1)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* Demonstrate Usage Of Custom ARM NEON Kernels Using Gstreamer * Demonstrate Usage Of Custom ARM NEON Kernels Using OpenVx * Demonstrate Usage Of DMPAC Using GStreamer * Demonstrate Usage Of DMPAC Using OpenVx * Edge AI: Unified Experience * EdgeAI Components Shall Come Pre-Installed In Linux * Support Scripts And Tools For Performance Reporting And Visualization		*** DL Runtime Support In Ubuntu 22.04 Docker Containers On J7 Target**	

Delta updates in Bold

AM69, AM69A | Graphics(1/2)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
*** GPU: Collecting Graphics API Traces** * GPU: Graphics Drivers Shall Be Published In Instrumentation Mode Configuration For Debug Purposes	*** GPU Driver Shall Support YUV Surface Format Is Needed For Remote Displays** *** GPU: Collecting GPU Profile Information In A File** *** GPU: Collecting GPU Profile Information Through An API** *** GPU: GPU Shall Support Active Power Management Controlled By The GPU Firmware** *** GPU: Graphics Driver Shall Support ARGB1555 Texture Format** *** GPU: Graphics Driver Shall Support DMABUF Import** *** GPU: Graphics Driver Shall Support NV12 Texture Format** *** GPU: Graphics Driver Shall Support UYVY Texture Format** *** GPU: Offline Analysis Of GPU API Traces** *** GPU: Offline Analysis Of GPU Profile Data**	* Enable Chromium Based Browser * Enable Flutter UI *** GPU: GPU Should Support Offscreen Rendering With No Display Dependency** *** GPU: Graphics Driver Shall Function In Offscreen Mode In The Absence Of Display Driver** * GPU: Graphics Driver Shall Support Frame Buffer Decompression On Input Textures *** GPU: Graphics Driver Shall Support Upto 8Kx8K Textures** *** GPU: Weston Shall Support USB Keyboard As HID** *** GPU: Weston Shall Support USB Mouse As HID**	

AM69, AM69A | Graphics(2/2)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
	*** GPU: Profiling And Analyzing GPU Load At Run Time** *** GPU: Vulkan Drivers** *** Graphics: Debug/profile/tracing Tools** *** Linux Driver Shall Powering Down The Entire GPU Core** * Linux: Report Out With Explanantion Benchmark Numbers On Glmark2		

AM69, AM69A | Linux(1/3)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* ADC: Single Shot Mode Of Operation * ADC: Support Continous Mode Of Operation * ATF: ATF: Support Starting BL33 Non-Secure Boot-Stage In EL2 * ATF: ATF: Support Starting Secure Runtime BL32 In TrustZone-EL1 * Core SDK Linux Shall Include Performance Documentation For A72 Benchmarks * Cortex A72 Multi-Cluster Stablization * Fusion 1 Board * HS Devices Must Enforce Anti-Rollback Protection At Upon Leaving TI Factory * OPTEE Replay Protected Memory Block (RPMB) * PCIe: "4 Virtual Functions (VF) On Each Of The First 4 PF	* 2xDual Instance Of DDR Controller * ADC: Up To 8 Inputs (Time-Multiplexed) * CSI-RX Driver Support In Linux * CSI-Rx: Shall Support 2.5GBPS Per Lane * Core SDK Linux Shall Include Performance Documentation For Crypto Driver Performance * Cortex A72 Multi-Cluster Stablization * DFU Flash To eMMC * Linux SDK Shall: Report Out With Explanation Benchmark Numbers On eMMC * MMCSD: DDR50 * MMCSD: JESD84-B51 (eMMC 5.1)	* ADC: 12-Bit, 4MSPS Analog To Digital Converter *** Core SDK Linux Shall Include Performance Documentation For eMMC EXT4 Read/Write And Raw Performance** *** Cpufreq** *** Display : 4K Resolution Support** * FPD LINK3 Utilizing Two CSI-TX From UB960 To CSI-Rx To A/A For 4 Cameras *** J7: USB: QSPI/OSPI1 Flashing With Uboot DFU** * Linux DDR Driver Shall Support Programming Inline ECC *** Linux Drivers Shall Support Serial Nand Driver On OSPI** * Linux Security Will Support OPTEE/ATF On The A72 * MSMC: Security Firewall	

Delta updates in Bold

AM69, AM69A | Linux(2/3)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* PCIe: 6 Physical Functions (PF) * PCIe: EP: 64-Bit Address Bus Width - Lower Memory Region * PCIe: End Point * SDK Shall Single And Multi Channel IMX390 2MP Sensors Via Fusion 1 * SERDES: PCIe + USB * SERDES: PCIe + USXGMII/QSGMII/SGMII * SPI: 18 Mbps For A 40 MHz Clock * SPI: 4 Chip Select Options * SPI: DMA Mode Of Operation * SPI: Full And Half Duplex	* MMCSD: SD Card: 4.10 (Limited To SD 3.0 By PHY Speed) * MMCSD: SDIO Version 3.0 * MMCSD: SDIO: SDR12 * MMCSD: SDIO: SDR25 * MMCSD: SDIO: SDR50 * MMCSD: SDR104 * MMCSD: eMMC-HS200 * MMCSD: eMMC-HS400 * OSPI Boot: OSPI Phy Calibration * PCIe: "Separate REFCLK (Internally/Externally Generated, Output/Input, SSC Required For NVMe).	* R5F SPL Shall Support Multiple Platforms * SA2UL: HMAC Using MD5, SHA1, SHA2-224, SHA2-256 And SHA2-512 * SPI: FIFO Mode Of Operation	

AM69, AM69A | Linux(3/3)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* SPI: Interrupt Mode * SPI: Master Mode * SPI: Slave Mode * SPI: Up To 50 MHz Operation * Secure Boot (HS Device) * Secure Boot Flow Shall Use The TIFS API To Load A Binary Based On The X509 Certificate * Uboot: First Stage Of U-Boot (SPL) To Boot Strapping Cortex A53/A72 * Uboot: MMCSD And eMMC Support * Uboot: Support Second Stage Of U-boot On Main Domain Cortex A53/A72 * Uboot: Support Two Stage Bootloader For Feature-Rich Functionalities	* SPI: Programmable Clock Phase And Polarity		

AM69, AM69A | Multimedia(1/3)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
	* Linux VDEC Driver Shall Support No Frame Copy (CPU Or DMA) For Exchanging Application To Codec Buffer *** Linux VENC GST Plugin On A72 Along With V4L2 Shall Take < 60 MHz (3%) Per Channel** * Linux VENC V4L2 Driver Shall Optimize DDR Memory Usage Per Channel For IO Buffers * Linux VENC V4L2 Driver Shall Optimize DDR Memory Usage Per Channel For Internal Buffers * SK-TDA4VH Multi-Channel H.265 Video Encode Application * VDEC GST Plugin On A72 Along With V4L2 Shall Take < 20MHz (1%) *** VDEC: API To Query Number Of Reference Frames For Bitstream** *** VDEC: Constant And Variable Bit Rates** * VDEC: Decoding Stream Headers *** VDEC: FLUSH For Bitstream And Picture Buffers**	*** VDEC: Performance Profiler**	* V4L2H264Dec Shall Support DMA Buffers

Delta updates in Bold

AM69, AM69A | Multimedia(2/3)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
	*** VDEC: Free Resources On Error Recovery** * VDEC: HW Watchdog For Decoder *** VDEC: Notify Non-Fatal Error Codes** * VDEC: Progressive Video Decode * VDEC: Publish Codec Capabilities Through API *** VDEC: Recovery From HW Lockups** *** VDEC: Recovery From SW Stream Errors** * VDEC: Send EOS Notification *** VDEC: Spatial And Temporal Error Concealment For H.265** *** VDEC: Strided Buffers For Output And Input Buffers**		

AM69, AM69A | Multimedia(3/3)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
	*** VDEC: Support Logging For Different Levels** * VENC: Configurable GOP - I, P, B Support * VENC: Minimum Block Size Values: MM_ENC_BLK_SZ_DEFAULT, MM_ENC_BLK_SZ_16x16, MM_ENC_BLK_SZ_8x8, MM_ENC_BLK_SZ_4x4 *** VENC: Query APIs To Get Encoded Buffer Sizes And Pixel Formats.** * VENC: Rate Control → Storage Profile (VBR And CBR) * VENC: Rate Control → Video Conferencing Profile, 2-10 Mbps (VBR And CBR) *** VENC: Strided Buffers For Output And Input Buffers** *** VENC: Support Logging For Different Levels** *** Video Codecs Shall Optimize The Memory Allocation**		

AM69, AM69A | Networking(1/2)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
	*** CPSW2G: 1PPS Output** *** CPSW2G: 802.1Qbu Frame Preemption** *** CPSW2G: 802.1Qbv Enhancements To Traffic Scheduling: Time-Aware Shaper(TAS)** *** Core SDK Linux Shall Include Performance Documentation For PCI NVME SSD** * PCIe: Common REFCLK (Externally Generated, Input, Option SSC) * PCIe: Common REFCLK (Internally Generated, Output, Option SSC) *** SERDES: USB + QSGMII/SGMII**	*** CPSWnG - Native: 2.5Gb External Ports (SGMII)** * CPSWnG Recovery Support Via Reset *** Core SDK Linux Shall Include Performance Documentation For CPSW2G** *** Core SDK Linux Shall Include Performance Documentation For CPSW9G** *** Core SDK Linux Shall Include Performance Documentation For PCI-ETH** *** J7 CPSW2G - Linux Performance Optimizations** *** Linux PCIe Driver Shall Support 4GB Region In The > 4GB Memory Space**	*** CPSWnG - Native: 2X 5Gb External Ports (XFI)** *** CPSWnG - Native: USXGMII Support (5 Gbps)** *** CPSWnG: 5Gb External Ports (XFI)** * CPSWnG: Reset Isolation For Switch Packet Forwarding Mode

Delta updates in Bold

AM69, AM69A | Networking(2/2)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
		*** SGMII Support From Linux**	

AM69 | SDK Apps(1/1)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* Release Notes Updates To Include Release Number, What'S New And Other Information	* Create New Web Based OOBE For SDKs * Industrial HMI Qt-based Demo * Support Startup Script To Extend FS Partition On SD/eMMC * Wi-Fi OOB Demo		

J721S2, AM68, AM68A SW Road map

J721S2 – Future SW Roadmap – Summary

	Processor SDK 8.4	Processor SDK 8.5	Processor SDK 8.6	Processor SDK 9.0	Processor SDK 9.1	Processor SDK 9.2	Processor SDK 10.0	Processor SDK 10.1
	01 SEP 2022	20 DEC 2022	15 MAR 2023	30 JUL 2023	30 NOV 2023	15 MAR 2024	15 JUL 2024	30 NOV 2024
LINUX	1. GPU/Encode/Decode productization 2. HS Support 3. DSS support 4. QSPI Boot 5. Main Domain CPSW2G	1. SA2UL user space crypto 2. GPU support 3. Codec Stabilization	1. HS-FS support 2. AM68A Low cost Starterkit support 3. SPI, ADC, CSI enhancements	1. LTS6.1, GCC11, Kirkstone migration 2. PCIe advanced features 3. CBASS driver 4. VTM TSHUT 5. Codec Allegro, ISO Compliance				

AM68A | Edge AI SDK(1/1)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* Demonstrate Camera Based Analytics Using GStreamer * Demonstrate Usage Of Custom ARM NEON Kernels Using GStreamer * Demonstrate Usage Of Custom ARM NEON Kernels Using OpenVx * Demonstrate Usage Of DMPAC Using GStreamer * Demonstrate Usage Of DMPAC Using OpenVx * Edge AI: Unified Experience * EdgeAI Components Shall Come Pre-Installed In Linux * Support Scripts And Tools For Performance Reporting And Visualization		*** DL Runtime Support In Ubuntu 22.04 Docker Containers On J7 Target**	

Delta updates in Bold

AM68, AM68A | Graphics(1/2)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
*** GPU: Collecting GPU Profile Information In A File** * GPU: Graphics Driver Shall Support Programming Through Vertex Shaders * GPU: Graphics Drivers Shall Be Published In Instrumentation Mode Configuration For Debug Purposes	*** GPU Driver Shall Support YUV Surface Format Is Needed For Remote Displays** *** GPU: Collecting GPU Profile Information Through An API** *** GPU: Collecting Graphics API Traces** *** GPU: GPU Shall Support Active Power Management Controlled By The GPU Firmware** *** GPU: Graphics Driver Shall Support ARGB1555 Texture Format** *** GPU: Graphics Driver Shall Support DMABUF Import** *** GPU: Graphics Driver Shall Support NV12 Texture Format** *** GPU: Graphics Driver Shall Support UYVY Texture Format** *** GPU: Offline Analysis Of GPU API Traces** *** GPU: Offline Analysis Of GPU Profile Data**	* Enable Chromium Based Browser *** GPU: GPU Should Support Offscreen Rendering With No Display Dependency** *** GPU: Graphics Driver Shall Function In Offscreen Mode In The Absence Of Display Driver** * GPU: Graphics Driver Shall Support Frame Buffer Decompression On Input Textures *** GPU: Graphics Driver Shall Support Upto 8Kx8K Textures** * Enable Flutter UI *** GPU: Weston Shall Support USB Keyboard As HID** *** GPU: Weston Shall Support USB Mouse As HID**	

Delta updates in Bold

AM68, AM68A | Graphics(2/2)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
	*** GPU: Profiling And Analyzing GPU Load At Run Time** *** GPU: Vulkan Drivers** *** Graphics: Debug/profile/tracing Tools** *** Linux Driver Shall Powering Down The Entire GPU Core** *** Vulkan Gallium Drivers From Imagination For BXS-4-64**		

AM68, AM68A | Linux(1/4)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* ADC: Single Shot Mode Of Operation * ADC: Support Continous Mode Of Operation * CSI-RX Driver Support In Linux * CSI-Rx: Programmable Formats * CSI-Rx: Shall Support Programmable Resolutions * CSI-Rx: V4L2 Capture Support * CSI-Rx: Virtual Channel / Data Type De-Interleaving * CSI-Rx: YUV420, YUV422, RGB, Raw * Core SDK Linux Shall Include Performance Documentation For A72 Benchmarks * Core SDK Linux Shall Support K3conf	* ADC: Up To 8 Inputs (Time-Multiplexed) * Cortex A72 Multi-Cluster Stablization * Dual Instance Of DDR Controller *** Linux IPC : Remote Proc Load And IPC Communication With C7x** *** Linux IPC: Ipc Communication With MCU R5** *** Linux IPC: U-Boot Load And IPC Comunication With C7x** * Tune QoS Knobs For J721S2 Platform (CSI2RX)	* Audio Capture, Playback Support *** Core SDK Linux Shall Include Performance Documentation For QSPI Raw read/Write Performance** *** Cpufreq** *** Display : 4K Resolution Support** * FPD LINK3 Utilizing Two CSI-TX From UB960 To CSI-Rx To A/A For 4 Cameras * Firewall ATF And OPTEE * J721s2: OSPI Nand Boot Support * Linux DDR Driver Shall Support Programming Inline ECC *** Linux Drivers Shall Support Serial Nand Driver On OSPI** *** Linux IPC : Remote Proc Load And IPC Communication With R5 Main (Non Lockstep Mode)**	* MCU R5F Core1 Should Be Usable As A Remoteproc In Split-mode After HSM Re-Arch * SERDES: Add Support To Enable Type C LN23 Configuration

AM68, AM68A | Linux(2/4)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* Cortex A72 Multi-Cluster Stablization * Display Controller : Single Display * Enable USB-C Lane Swapping Lane3/2 * Fusion 1 Board * Linux Drivers Shall Support ADC Driver For Customer Board Bringup * Linux Kernel Driver Shall Support QSPI As A Memory Device * OPTEE Replay Protected Memory Block (RPMB) * OPTEE: Secure Runtime Support * PCIe Wifi Card * SERDES: PCIe + USB		* Linux Security Will Support OPTEE/ATF On The A53/A72 * R5F SPL Shall Support Multiple Platforms * SPI: FIFO Mode Of Operation	

AM68, AM68A | Linux(3/4)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* SERDES: Support To Enable Type-C Lane Swap When Gpio-Typec-Dir Pin Is Not Supported In Hardware * SPI: 18 Mbps For A 40 MHz Clock * SPI: 4 Chip Select Options * SPI: DMA Mode Of Operation * SPI: Full And Half Duplex * SPI: Interrupt Mode * SPI: Master Mode * SPI: Programmable Clock Phase And Polarity * SPI: Slave Mode * SPI: Up To 50 MHz Operation			

AM68, AM68A | Linux(4/4)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* [CAN]: CAN Driver In Linux			

AM68, AM68A | Networking(1/1)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* Linux Kernel Driver Shall Support QSPI As A Memory Device	*** Core SDK Linux Shall Include Performance Documentation For PCI NVME SSD** *** Core SDK Linux Shall Include Performance Documentation For PCI-ETH**		

AM68 | SDK Apps(1/1)

PSDK_8.6	PSDK_9.0	PSDK_9.1	PSDK_9.2
15 MAR 2023	30 JUL 2023	30 NOV 2023	30 MAR 2024
* Release Notes Updates To Include Release Number, What'S New And Other Information	* Create New Web Based OOBE For SDKs * Industrial HMI Qt-based Demo *** Multi-Channel H.264 Video Decode Application** *** Multi-Channel H.264 Video Encode Application** *** Multi-Channel H.265 Video Encode Application** * Support Startup Script To Extend FS Partition On SD/eMMC * Wi-Fi OOB Demo		

Delta updates in Bold