

Exhibit E

EXHIBIT E
U.S. Patent No. 7,804,435

Claim 1	Exemplary Accused Product: NXP i.MX 8QuadMax Applications Processor
An apparatus comprising:	<p>To the extent that the preamble is limiting, the NXP processors meet this limitation.</p> <p>The NXP processors include a Video Processing Unit:</p> <div data-bbox="521 873 1624 1178" style="border: 1px solid black; padding: 5px;"><p>This chapter introduces the i.MX 8QuadMax (i.MX8QM). The i.MX8QM is a comprehensive multimedia device targeting high-end automotive and industrial segments. The chip is built using a leading edge process to achieve both high performances and low-power consumption. The chip relies on a powerful core complex based on a dual (2x) Cortex-A72 cluster for use-cases requiring high computing performances and a quad (4x) Cortex-A53 cluster running multimedia use-cases at a lower-power consumption.</p></div> <p>i.MX 8QuadMax Applications Processor Reference Manual, § 1.1.1, Document No.: IMX8QM-UM-RM-09/2021 (downloaded from nxp.com). To illustrate further:</p> <div data-bbox="521 1331 1624 1612" style="border: 1px solid black; padding: 5px;"><ul style="list-style-type: none">• 1x VPU<ul style="list-style-type: none">• 4x M0+ processors with 16KB Cache (1x for decode, 2x for transport stream)• Supports H.265 decode (4Kp60)• Supports H.264 decode (4Kp30)• H.264 encoder (1080p30)</div> <p><i>Id.</i>, § 1.1.2.</p>

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a power management controller	<p>The NXP processors include a System Control Unit (SCU) that handles power management.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>1.2.1.1 SCU</p> <p>The System Controller Unit (SCU) is made of a Cortex-M4 processor running at 266MHz with 256KB of TCM and a set of peripherals and interfaces to interface with an external PMIC and to control internal subsystems. The SCU Cortex-M4 processor to boot the chip (see System Boot). The SCU is responsible for:</p> <ul style="list-style-type: none"> • Booting the system • Interfacing with the external PMIC through a dedicated I2C and • Managing power, clocking, and reset of internal subsystems • Controlling pin multiplexing and IO control (drive strength and • Managing resource partitioning through isolation (see xRDC chapter • Managing thermal </div> <p>i.MX 8QuadMax Applications Processor Reference Manual, § 1.2.1.1, Document No.: 0, 9/2021 (downloaded from nxp.com).</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>8.18.4 System Clocks</p> <p>All system resources are controlled only through SCU Firmware using the following functions. These functions can be found in the SCU Firmware Guide. The following table and the clock tree provides information about the module clocks, the modules associated with them, and its clock roots.</p> </div> <p><i>Id.</i>, § 8.18.4. To illustrate further:</p>

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	<p>13.1.7.1 Power Management Service</p> <p>All aspects of power management including power control, bias control, reset control, and wake-up event monitoring are grouped within the SC Power Management service.</p> <ul style="list-style-type: none"> • Power Control - The SC firmware is responsible for centralized management of power controls and external power management devices. It manages power and voltage of power domains as well as bias control. It also resets power required due to power state transitions. This is all done via the API by communicating power state needs for individual resources. • Clock Control - The SC firmware is responsible for centralized management of clock controls. This includes clock sources such as oscillators and PLLs, clock dividers, muxes, and gates. This is all done via the API by communicating clocking needs for individual resources. • Reset Control - The SC firmware is responsible for reset control. This includes booting/rebooting a partition, obtaining reset reasons, and starting/stopping a partition. <p><i>Id.</i>, § 13.1.7.1.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>The SC firmware runs on the SCU immediately after the SCU Read-only-memory (ROM) finishes loading images from the first container. It is responsible for initializing many aspects of the system. This includes power and clock configuration and resource isolation hardware configuration. By default, the SC is the primary boot core to own most of the resources and launches the boot core. Additional configuration is provided by boot code.</p> </div> <p>System Controller Firmware API Reference Guide, § 1.1, i.MX8 QXP Die (Version 1.5) available at https://community.nxp.com/pwmxxy87654/attachments/pwmxxy87654/imx-processors/150415/1/sc_fw_api_qx_b0.pdf.</p>

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	<p>To illustrate further:</p> <div data-bbox="532 835 1624 1556" style="border: 1px solid black; padding: 10px;"><p>1.3.1 Power Management Service</p><p>All aspects of power management including power control, bias control, clock control, reset control, and monitoring are grouped within the SC Power Management service.</p><ul style="list-style-type: none">• Power Control - The SC firmware is responsible for centralized management of power management devices. It manages the power state and voltage of power domains as well as also resets peripherals as required due to power state transitions. This is all done via the SC power state needs for individual resources.• Clock Control - The SC firmware is responsible for centralized management of clock control sources such as oscillators and PLLs as well as clock dividers, muxes, and gates. This is all done by communicating clocking needs for individual resources.• Reset Control - The SC firmware is responsible for reset control. This includes booting, obtaining reset reasons, and starting/stopping of CPUs.<p>Before any hardware in the SoC can be used, SW must first power up the resource and enable any otherwise access will generate a bus error. The Power Management (PM) API is documented here.</p></div> <p><i>Id.</i>, § 1.3.1.</p>

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