

# Digi ConnectCore 95

High-performance wireless all-in-one SOM solution based on NXP i.MX 95 with integrated cloud, security, AI/ML services and scalability for industrial IoT applications

**Digi ConnectCore® 95** redefines the system-on-module (SOM), delivering integrated intelligence, connectivity and security — built in from the start. Based on the NXP® i.MX 95 application processor, the high-performance wireless all-in-one SOM platform provides a complete solution to simplify the development and management of intelligent connected devices.

By integrating hardware, cloud services, security services and lifecycle management in a single platform, companies can innovate faster, improve product resilience and future-proof their solutions in evolving markets. With seamless connectivity and remote management including over-the-air (OTA) software updates, it reduces complexity, accelerates time-to-market and ensures long-term compliant operations and scalability.

ConnectCore 95 empowers businesses to deliver smarter medical devices, secure industrial systems, and advanced retail solutions. The globally certified Wi-Fi 6E tri-band connectivity (2.4/5/6 GHz) with 80 MHz channel bandwidth provides high throughput for higher-end use cases and reduces congestion/interference issues from existing networks and older devices. The Digi ConnectCore 95 SOM is designed for reliability across a wide range of applications with up to six power-efficient Arm® Cortex®-A55 cores for performance, plus Cortex-M33, Cortex-M7, NPU and NXP PMICs for maximum power efficiency.

The Digi SMTplus® surface-mount module is optimized for the i.MX 95 processor and delivers maximum design flexibility and robustness for portable and demanding industrial applications. Digi ConnectCore 95 is also available in a SMARC® form factor with a standardized, connector-based solution for easy integration, replacement and maintenance.

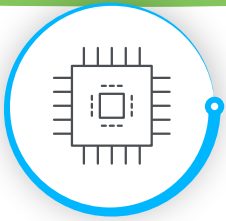
**Digi ConnectCore SOM solutions** provide built-in security with **Digi TrustFence®**, a fully integrated device-security framework simplifying the process of securing connected devices. **Essential Digi ConnectCore Cloud Services** are included with every SOM. **Premium Digi ConnectCore Cloud Services** (with flexible pay-per-use option), **Digi ConnectCore Security Services** and **Expert Support** extend capabilities for additional development, deployment, maintenance and long-term lifecycle support.

**Digi Embedded Yocto®**, Digi's feature-rich Linux distribution — with many extensions for embedded product design — provides a fully tested, validated and maintained Linux software platform. **Digi Wireless Design Services** (WDS) provides additional solutions to get your products and solutions to market smarter and faster.

SOM	Development Tools	Essential Cloud Services	Security	Longevity / Lifecycle Management
PMICs	Up to 128 GB eMMC	Up to 16 GB LPDDR5	Wi-Fi 6E 802.11ax	Bluetooth® 5
SMTplus® / SMARC®		Secure Element (optional)		
<b>2-6x Arm® Cortex®-A55 up to 1.8 GHz</b> L1 32 kB I   L1 32 kB D NEON   64 kB L2 Cache   FPU 512 kB L3 Cache (ECC)		<b>1x Arm® Cortex®-M7 up to 800 MHz</b> L1 32 kB I   L1 32 kB D NVIC   MPU   FPU 512 kB TCM (ECC)		
<b>Low Power Real Time Domain</b>				
<b>SYSTEM CONTROL</b>	<b>LOW POWER SECURITY MCU</b>	<b>CONNECTIVITY AND I/O</b>		
DMA	Arm Cortex-M33	2x UART/USART, 2x SPI		
Watchdog, Periodic Timer	16 kB+16kB Code+Sys Cache	2x I2C, I3C		
6x PWM with 16-bit counter	FPU   MPU   NVIC	CAN-FD		
Temperature Sensor	512 kB TCM/OCRAM w/ ECC	2-lane I2S TDM Tx/Rx		
		8-ch PDM Mic Input		
		MQS		
<b>Flex Domain</b>				
<b>SYSTEM CONTROL/MEMORY</b>	<b>ML AND MULTIMEDIA</b>	<b>CONNECTIVITY AND I/O</b>		
2x DMA	eIQ® Neutron N3-1024S NPU	6x UART/USART, 6x SPI		
3x Watchdog, Periodic Timer	3D GPU + 2D GPU	6x I2C, I3C		
6x PWM with 16-bit counter	4K VPU, ISP	4x CAN-FD		
Secure JTAG	15-lane I2S TDM Tx/Rx, SPDIF	2x Flex IO (32-bit)		
3x SD SDIO 3.0/eMMC 5.1	2x MIPI-CSI 2-lane (1x w/ DSI)	ADC (8-channel, 12-bit)		
Octal SPI Flash w/ Inline Crypto	MIPI-DSI 4-lane w/ PHY	1x 10GbE + 2x GbE (w/ TSN)		
1376 kB OCRAM w/ ECC	2x 4- or 1x 8-lane LVDS w/ PHY	1x USB-C 3.0, 2x USB 2.0		
<b>System Clock</b>		<b>External DRAM</b>		
Oscillator	PLLs	32x LPDDR5/LPDDR5X (Inline ECC)		
<b>SMARC</b>				
Temperature Sensor	MCU	EEPROM	RTC	TPM 2.0   DSI to DP Bridge   USB 3.0 Hub   Gbe ENET PHY
<b>EdgeLock® Secure Enclave</b>				
Crypto	Tamper Detection	Secure Clock	Secure Boot	eFuse Key Storage   Random Number

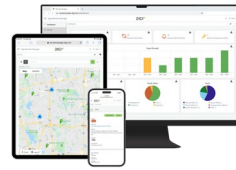
## Key features, benefits and applications

- Complete industrial i.MX 95 embedded SOM platform
- All-in-one solution with integrated SOC 2® Type 2 compliant **Essential Digi ConnectCore Cloud Services** and **Digi ConnectCore Security Services**
- AI/ML NXP eIQ® Neutron neural processing unit (NPU)
- Pre-certified tri-band 802.11ax Wi-Fi 6E and Bluetooth 5
- Digi SMTplus form factor (40 x 45 mm) for ultimate reliability
- Superior power management, hardware and software support
- Seamless cellular modem and **Digi XBee®** integration
- High level of pin compatibility with **Digi ConnectCore SOMs**
- Built-in **Digi TrustFence** device security, identity and privacy
- **Digi Embedded Yocto** Linux support



# DIGI CONNECTCORE 95 SOM SOLUTION

## Solution and Services



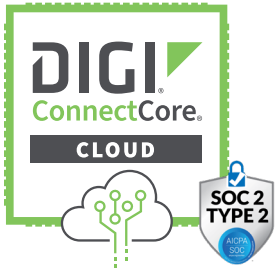
Connect this device with Digi ConnectCore Cloud Services. Create. Configure. Deploy. Manage.

### A complete all-in-one system-on-module solution

Digi ConnectCore 95 delivers a complete solution with **Essential Digi ConnectCore® Cloud Services** included with every SOM for integrated edge-to-cloud connectivity to enable over-the-air software updates, remotely manage deployments, improve product quality and ease-of-use, automate processes and reduce costs. Digi ConnectCore 95 has everything you need to launch products faster, protect investments, scale and stay ahead.

#### Manage your network and connected devices from edge-to-cloud (SOC 2 Type 2 compliant)

**Digi ConnectCore Cloud Services** enable OEMs in a wide range of industries to create connected devices with remote-dashboard, -service and -application capabilities using Digi ConnectCore system-on-modules (SOMs).



- ✓ Industry-leading cloud and edge tools for rapid device deployment, and easier asset management
- ✓ Automate mass firmware and software updates to enhance functionality, stay in compliance and scale your deployment
- ✓ Access data from edge devices that were previously out of reach
- ✓ Receive real-time alerts and detailed network reports
- ✓ Integrate device data through open APIs for greater insights and control with third-party applications
- ✓ Monitor network, device, and asset performance and security with bi-directional communications
- ✓ Accelerate development, testing and deployment of web applications for connected devices with a flexible, scalable **IoT application framework and IoT device simulator**

#### Keep your product secure during the entire product lifecycle

**Digi ConnectCore Security Services** enable customers to keep products secure and meet requirements like the **Cyber Resilience Act**. These are services and tools that enable you to maintain the security of your devices throughout the entire product lifecycle.



- ✓ Make security easier and more accessible by providing a curated security analysis
- ✓ Provide visibility on the Digi Embedded Yocto (DEY) security status with available vulnerability reports
- ✓ Identify security issues in Digi ConnectCore DEY-based customer products
- ✓ Monitor and maintain security in devices throughout the entire product lifecycle
- ✓ Utilize Digi engineering and consulting services to help resolve security issues
- ✓ Take advantage of SBOM analysis and CVE monitoring, whitelisting and filtering for actionable reports
- ✓ Review binary image scans for additional vulnerability insights

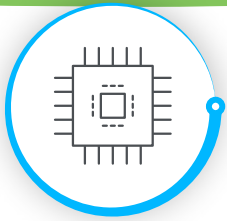
#### Build, deploy and manage throughout the lifecycle

**Digi ConnectCore Tools** are included as part of the complete Digi ConnectCore 95 solution to help companies build, deploy and manage throughout the lifecycle.



- ✓ **ConnectCore Smart IOmux**  
Simplify design and software configuration
- ✓ **ConnectCore Quick Setup**  
Provisioning during development and in production
- ✓ **IoT Application Framework**  
Enable customized front-end web applications for products
- ✓ **IoT Device Simulator**  
Create virtual devices to test your solution





## DIGI CONNECTCORE 95 SOM SOLUTION

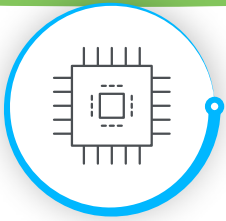
# Specifications



Connect this device with  
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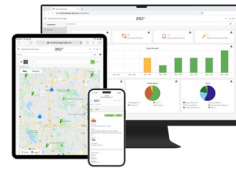
Specifications	Digi ConnectCore 95 All-in-One SMT SOM Solution
APPLICATION PROCESSOR	NXP i.MX 95 <ul style="list-style-type: none"> <li>Up to 6x Cortex-A55 core, up to 1.8 GHz (64-bit)</li> </ul>
MEMORY	Up to 128 GB flash (eMMC), up to 16 GB LPDDR5 (32-bit, ECC)
ARTIFICIAL INTELLIGENCE*	AI/ML NXP eIQ Neutron NPU N3-1024S, 2 TOPs (hardware), up to 8 TOPs sparse model performance
PMIC	NXP PF09 + PF53 and Energy Flex Multi-Domain architecture for maximum power efficiency
VIDEO / GRAPHICS	GPU: Arm Mali G310 GPU (OpenGL® ES 3.2, Vulkan® 1.2, OpenCL 3.0), 2D Blitter VPU: 4K60p H.265/H.264 decode or encode (4K30p H.265/H.264 simultaneous encode and decode) LCD: Up to 3 simultaneous displays, 1x 333M pixel/s MIPI-DSI (4-lane, 2.5 Gbps/lane) supporting 4K30p or 3840 x 1440p60, up to 1080p60 LVDS Tx (1x 8-lane) or 2x 1080p30 (2x 4-lane)
CAMERA	MIPI-CSI (2x 4-lane, 2.5 Gbps/lane) with PHY (1 mux with DSI) with up to 8 virtual channels; up to 500M pixel/s throughput to scale from 1x 4K30p to 4x 1080p30 cameras
IMAGE SIGNAL PROCESSOR	NXP ISP (12 MP at 45 fps, 8 MP at 30 fps) with RGB-IR support (4x4 array pattern), YUV 420, YUV 422, YUV 444, RGB 888
SECURITY	<b>Digi TrustFence:</b> secure boot, filesystem encryption, tamper detection, secure JTAG, secure console, secure build environments, secure firmware updates; EdgeLock® secure enclave: crypto, tamper detection, secure clock, secure boot, eFuse key storage, random number; Arm TrustZone (Cortex-A and Cortex-M) i.MX Safety Concept targeting ISO-26262 (ASIL-B) / IEC 61508 (SIL-2) NXP Safety Manager and NXP SafeAssure® Software Framework [Arm Cortex-M33] H/W Safety Checkers and Safe 2D display pipeline PQC Dilithium 3.1 signature verification (secure boot and debug)
PERIPHERALS / INTERFACES	2x PCIe Gen 3.0 (1-lane) 1x USB 3.0 5 Gbps Type C with PHY 1x USB 2.0 OTG with PHY 3x SD 3.0 / SDIO 3.0 / eMMC 5.1 8x Low Power Universal Asynchronous Receiver / Transmitter (LPUART) modules 8x Low Power I2C modules, 2x I3C 8x Low Power SPI (LPSP) modules, XSPI responder 5x FlexCAN with flexible data-rate (FD) support 6x Timer/Pulse-Width Modulator (PWM) with 16-bit counter 1x 12-bit ADC module with accurate internal voltage reference, up to 8 channels 2x 32-pin FlexIO interfaces (bus or serial I/O) Up to 112 GPIOs
AUDIO	17-lane I2S TDM (32-bit at 768 KHz) 8-channel PDM microphone input, Medium Quality Sound (MQS) output 1x S/PDIF input and output
ETHERNET	1x 10GbE + 2x Gb Ethernet (All w/TSN); AVB & IEEE 1588 for sync; and IEEE
WI-FI	Wi-Fi 6E 802.11ax tri-band, 80 MHz channel bandwidth, high throughput, 1x1 wireless
BLUETOOTH	Bluetooth 5

\*TOPs varies based on model optimization, data type, and data size. 5 TOPs calculated by dividing VIP8000 2.3 TOPs rating by performance relative to N3-1024S (2.3 / 0.41 = 5.7).



## DIGI CONNECTCORE 95 SOM SOLUTION

# Specifications



Connect this device with Digi ConnectCore Cloud Services. Create. Configure. Deploy. Manage.

Specifications	Digi ConnectCore 95 All-in-One SMT SOM Solution
OPERATING TEMPERATURE	Industrial-rated -40 °C to 85 °C (-40 °F to 185 °F) or 0 °C to 70 °C (32 °F to 158 °F), depending on use case and enclosure/system design
STORAGE TEMPERATURE	-50 °C to 125 °C (-58 °F to 257 °F)
RELATIVE HUMIDITY	5% to 90% (non-condensing)
RADIO APPROVALS**	US, Canada, EU, Japan, Australia/New Zealand, Brazil, Mexico
EMISSIONS / IMMUNITY / SAFETY**	FCC Part 15 Class B, EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, ICES- 003 Class B, VCCI Class II, AS 3548, FCC Part 15 Subpart C Section 15.247, IC (Industry Canada), RSS-210 Issue 5 Section 6.2.2(o), EN 300 328, EN 301 489-17, EN 55024, EN 301 489-3, Safety (IEC 62368-1); visit <a href="http://digi.com/resources/certifications">digi.com/resources/certifications</a> for latest updates
DESIGN VERIFICATION*	Temperature: IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-78 Vibration/shock: IEC 60068-2-6, IEC 60068-2-64, IEC 60068-2-27, HALT
MECHANICAL DIMENSIONS	118 castellated vias, LGA-474, 1.27 mm pitch 40 mm x 45 mm x 3.5 mm (1.6 in x 1.8 in x 0.1 in)
PRODUCT WARRANTY	3-year

\*\*Visit [digi.com/resources/certifications](http://digi.com/resources/certifications) for latest updates.



### Digi Wireless Design Services (WDS)

Digi WDS helps companies solve business problems and create innovative IoT products with embedded SOMs, wireless technologies, a library of proven IP and a dedicated team of creative designers and engineers. Let our RF experts and world class engineering team guide you through the development cycle from concept to certification and production.





## DIGI CONNECTCORE 95 SOM SOLUTION

### Part Numbers

Part Numbers	Digi ConnectCore 95 Development Kit*
CC-WMX95-KIT	Digi ConnectCore 95 Development Kit for SMTplus and SMARC module with development board and Digi ConnectCore 95 wireless SOM, NPU/ISP, 8 GB LPDDR5, 32 GB eMMC, Digi ConnectCore Cloud Services Premium 1-year license and Digi ConnectCore Security Services trial account

Part Numbers	Digi ConnectCore 95 SMT SOM Solution*
CC-WMX-B30F-B1	Digi ConnectCore 95 — i.MX 959, hexa A55, NPU/ISP, 8 GB LPDDR5, 32 GB eMMC, Wi-Fi 6E 802.11ax, Bluetooth 5.4, -40 °C to 85 °C (-40 °F to 185 °F), Cloud Services, SMTplus
CC-MX-B30F-B1	Digi ConnectCore 95 — i.MX 959, hexa A55, NPU/ISP, 8 GB LPDDR5, 32 GB eMMC, -40 °C to 85 °C (-40 °F to 185 °F), Cloud Services, SMTplus
CC-WMX-B88D-B1	Digi ConnectCore 95 — i.MX 952, dual A55, 2 GB LPDDR5, 8 GB eMMC, Wi-Fi 6E 802.11ax, Bluetooth 5.4, 0 °C to 70 °C (32 °F to 158 °F), Cloud Services, SMTplus*
CC-MX-B88D-B1	Digi ConnectCore 95 — i.MX 952, dual A55, 2 GB LPDDR5, 8 GB eMMC, 0 °C to 70 °C (32 °F to 158 °F), Cloud Services, SMTplus*

Part Numbers	Digi ConnectCore 95 SMARC SOM Solution*
CC-WMX-B30F-BS	Digi ConnectCore 95 — i.MX 959, hexa A55, NPU/ISP, 8 GB LPDDR5, 32 GB eMMC, -40 °C to 85 °C (-40 °F to 185 °F), Cloud Services, SMARC
CC-MX-B88D-BS	Digi ConnectCore 95 — i.MX 952, dual A55, 2 GB LPDDR5, 8 GB eMMC, 0 °C to 70 °C (32 °F to 158 °F), Cloud Services, SMARC

Part Numbers	Accessories
CC-ACC-LCDH-10	LCD application kit, including 10 in WXGA (1280x800) LCD panel with PCAP touch

\*Additional part numbers and population options available by request (MOQ applies). Contact Digi to learn more.



## DIGI CONNECTCORE 95 SOM SOLUTION

# Part Numbers

### Part Numbers

### Digi ConnectCore Cloud Services\*

#### DIGI CONNECTCORE CLOUD SERVICES — FLEXIBLE PAY-PER-USE SUBSCRIPTION

OEM-CS-PPU-BASE	Digi ConnectCore Cloud Services — Premium pay-per-use subscription Monthly usage fee per active device count including 60 MB/month/active device pooled telemetry data and unlimited OTA data
OEM-CS-PPU-DATA	Digi ConnectCore Cloud Services — Premium pay-per-use subscription Per overage MB usage fee (with OEM-CS-PPU-BASE)

#### DIGI CONNECTCORE CLOUD SERVICES — LICENSING

CC-CS-PRM-1-1YR	Digi ConnectCore Cloud Services — Premium 1-year (1 device)
CC-CS-PRM-100-1YR	Digi ConnectCore Cloud Services — Premium 1-year (100 devices)
CC-CS-PRM-100-3YR	Digi ConnectCore Cloud Services — Premium 3-year (100 devices)
CC-CS-PRM-100-5YR	Digi ConnectCore Cloud Services — Premium 5-year (100 devices)

\*Essential Digi ConnectCore Cloud Services included with Digi ConnectCore 95 SOM. Premium licensing and pay-per-use subscriptions offer additional capabilities and flexible options.

### Part Numbers

### Digi ConnectCore Security Services

CC-SEC-ESS	Digi ConnectCore Security Services — Essential 1-year
CC-SEC-PRM	Digi ConnectCore Security Services — Premium 1-year
CC-SEC-ENT	Digi ConnectCore Security Services — Enterprise 1-year
CC-SEC-ENT-ADD	Digi ConnectCore Security Services — Enterprise for additional product (same duration as main contract)

### Part Numbers

### Expert Support

DG-EXPE-24-15HRS	Expert Support Agreement — 1 year
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The information provided in this document is preliminary and may be subject to change without notice.

For more information, visit [digi.com](https://www.digi.com).



For more information about Digi ConnectCore 95,  
visit [www.digi.com/connectcore95](https://www.digi.com/connectcore95).

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