



Digi ConnectCore MP133 Development Kit

Complete development platform for intelligent, connected and secure embedded industrial products with a broad suite of tools and turnkey Linux software support

The **Digi ConnectCore® MP133 Development Kit** is a complete platform. It features an integrated, secure, industrial system-on-module (SOM) with wireless connectivity, based on the STM32MP13 microprocessor, and a complete, embedded Linux software platform based on the Yocto® Project.

The kit seamlessly integrates pre-certified dual-band Wi-Fi 5 (802.11a/b/g/n/ac), Bluetooth® 5.2 and Gigabit Ethernet connectivity. Digi ConnectCore MP133 is designed for industrial and medical use with high levels of security, reliability, performance and 10+ year longevity. The Digi SMTplus® surface mount form factor provides simplified design integration, flexibility and reliability.

Embedded device security is a critical design aspect for the growing number of connected IoT applications. **Digi ConnectCore SOM solutions** provide built-in security with **Digi TrustFence®**, a fully integrated device-security framework simplifying the process of securing connected devices.

Digi ConnectCore Cloud Services, Digi ConnectCore Security Services and **Expert Support** provide additional capabilities for development, deployment and maintenance.

The ConnectCore SOM solution provides ready-to-use building blocks, a complete, embedded Linux software platform based on the Yocto® Project, and development tools. This helps OEMs lower research and development costs, realize a lower total cost of ownership and streamline time-to-market.

With over twenty years of embedded SOM experience enabling millions of globally connected products, Digi is a trusted embedded and IoT solutions provider, simplifying the way customers design, build and deploy connected applications. **Digi Wireless Design Services** (WDS) offer additional cellular integration support, certification assistance, and custom design and build services to get your products to market smarter and faster.



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

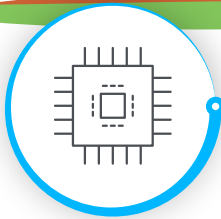
The kit includes:

- ✓ Digi ConnectCore MP133 development board with SOM
- ✓ Console port cable
- ✓ Dual-band wireless antenna
- ✓ Power supply and accessories
- ✓ Reference designs and online documentation

PART NUMBER	DESCRIPTION
CC-WMP133-KIT	Digi ConnectCore MP133 Development Kit

Key features, benefits and applications

- Industrial-grade, scalable, embedded SOM platform
- Pre-certified dual-band Wi-Fi 5 (802.11ac) and Bluetooth 5.2
- Power management with hardware and software support
- Digi SMTplus form factor (29 x 29 mm) for ultimate reliability
- High level of pin-compatibility with **ConnectCore 6UL SOMs**
- Built-in **Digi TrustFence** device security, identity and privacy
- Seamless cellular modem and **Digi XBee®** integration
- Remote monitoring, device management and IoT application enablement with **Digi ConnectCore Cloud Services**
- **Digi Embedded Yocto** Linux support
- Turnkey development services available from **Digi WDS**



DIGI CONNECTCORE MP133 DEVELOPMENT KIT

Specifications

SPECIFICATIONS	DIGI CONNECTCORE MP133 SOM
FEATURES	
APPLICATION PROCESSOR	STMicroelectronics STM32MP133C, Arm® Cortex®-A7 at 650 MHz, secure boot, crypto engine
MEMORY	256 MB SLC NAND flash, 256 MB DDR3L
SECURITY	Secure boot, TrustZone® 12x tamper pins incl. 5x active tamper, 1x TRNG (6 triple oscillators), 1x CRC calc. unit, 1x cryptographic processor, hardware acceleration with DMA support; Encryption/decryption: DES/TDES: ECB (electronic codebook) and CBC (cipher block chaining) 64-, 128- or 192-bit key; AES: ECB, CBC, GCM, CCM, and CTR (counter mode) chaining algorithms, 128-, 192- or 256-bit key; Universal HASH: SHA-1, SHA-224 and SHA-256, SHA-384, SHA-512, SHA-3, HMAC; Digi TrustFence embedded security framework
PERIPHERALS / INTERFACES	5x I2C, 4x UART + 4x USART, 5x SPI (4 with full duplex I2S) 2x SAI (stereo audio: I2S, PDM, SPDIF Tx), SPDIF Rx (4 inputs) 2x SDMMC up to 8-bit (SD / eMMC™ / SDIO) 2x CAN FD (including 1x TTCAN) 2x USB 2.0 high-speed host or 1x USB 2.0 high-speed host + 1x USB 2.0 full-speed OTG, up to 135 I/O ports with interrupt capability 2x ADCs (up to 12-bit), 1x temperature sensor, 1x DFSDM (4 channels/2 filters), internal or external ADC reference VREF+ 2x 32-bit timers with up to 4 IC/OC/PWM or pulse counter and quadrature (incremental) encoder input 2x 16-bit advanced timers, 10x 16-bit general-purpose timers (including 2 basic timers without PWM) 5x 16-bit low-power timers, Secure RTC, 4 Cortex-A7 system timers (secure, nonsecure, virtual, hypervisor) 2x independent watchdogs
ETHERNET	2x 10/100 M or Gigabit Ethernet GMAC IEEE 1588v2, MII/RMII/RGMII
WIRELESS	Wi-Fi 5 dual-band 802.11a/b/g/n/ac 1x1 radio (up to 433.3 Mbps) with strong WPA3-Enterprise authentication/encryption -40 °C to 85 °C (-40 °F to 185 °F) full temperature range; Bluetooth 5.2 (Basic Rate, Enhanced Data Rate and Bluetooth Low Energy)
OPERATING TEMPERATURE	Industrial: -40 °C to 85 °C (-40 °F to 185 °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 www.digi.com/resources/certifications 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
MOUNTING / PIN COUNT	Common Digi SMTplus surface mount footprint using 76-pad edge castellated pads (1.27 mm pitch) or 245-pad LGA (1.27 mm pitch) option
MECHANICAL DIMENSIONS	29 mm x 29 mm x 3 mm (1.14 in x 1.14 in x 0.12 in)
PRODUCT WARRANTY	3-year



DIGI CONNECTCORE MP133 DEVELOPMENT KIT

Part Numbers

PART NUMBERS	DIGI CONNECTCORE MP133 DEVELOPMENT KIT
CC-WMP133-KIT	Digi ConnectCore MP133 development kit with development board and Digi ConnectCore MP133 256 MB/256 MB wireless SOM

PART NUMBERS	DIGI CONNECTCORE CLOUD SERVICES
CC-CS-ESS-1-1YR	Digi ConnectCore Cloud Services — Essential 1-year (1 device)
CC-CS-ESS-100-1YR	Digi ConnectCore Cloud Services — Essential 1-year (100 devices)
CC-CS-ESS-100-3YR	Digi ConnectCore Cloud Services — Essential 3-year (100 devices)
CC-CS-ESS-100-5YR	Digi ConnectCore Cloud Services — Essential 5-year (100 devices)
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)

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 — Additional product (same duration as main contract)

PART NUMBERS	EXPERT SUPPORT
DG-EXPE-12	Expert 12x5 support for end users
DG-EXPE-24	Expert 24x7 support for end users



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