CMCM2FB - NUC Pro with A/V Chassis

Modular Customization

Intel® NUC Elements are an entirely new way to design and build Mini PCs. Compute module options along with a series of Intel-designed components, deliver the flexibility of modular computing letting you create the exact systems you want. Intel NUC Elements include compute module and chassis module options, allowing you to develop innovative solutions. Start with a compute module with the exact processor you need and plug it into your choice of chassis module. By transforming how systems can be built and serviced, Intel is once again revolutionizing computing in order to help you succeed. Perfect for many uses from Telehealth to conferencing, even work from home. The Intel NUC Elements let you deliver custom solutions with minimal R&D time.

Audio Video Features

Fort Beach is available in two options CMCM2FB and the AV optioned CMCM2FBAV. The Video Capture and Audio version features an internal HDMI video capture card with up to 1080P resolution, HDMI passthrough and audio in/out for a I/O-rich solution to capture, stream and record. Compact and powerful, the Intel NUC Compute Element along with Intel NUC Board and Chassis Elements, deliver the flexibility of modular computing—so you can create custom solutions to fit your clients' exact needs.

Build Embedded Solutions

Intel® NUC Elements enable you to design systems for video collaboration, distance learning, and other A/V based deployments. Housed in a small quiet chassis that will fit almost anywhere. The NUC 8 Pro can be easily integrated into digital solutions. The two chassis options provide flexibility in usage, and are qualified for 24/7 operation, making it the ideal PC solution for virtual meetings, live streaming workshops and recasting presentations. All modules carry a 3-year warranty, for performance that's designed to last.

Highlighted features
- Intel NUC Compute Element U-Series (Required)
- Actively-Cooled chassis
- Dual M.2 slots for NVMe and SATA SSDs
- Intel® Optane™ Memory ready
- Dual HDMI 2.0a for dual 4K@60Hz
- Dual Intel® Gigabit LAN
- 3x USB 3.1 gen 2 type A ports
- 1x front port 3.2x internal USB 2.0 type A
- Up to 7.1 multichannel (or dual 8-channel) digital audio via HDMI
- Front panel header with Vcc5/1A, 5Vsby2A, 3.3Vsby/1A
- Qualified for 24x7 operation; delayed AC start; DC overvoltage protection
- EDID emulation
- RP-SMA Dual-Band Antennas
- $12 – 24V_{DC}$ rear jack
- Metal chassis with Kensington lock
- VESA plate included
- Internal Wi-Fi and Bluetooth antennas

Customization
- Intel NUC Compute Element U-Series
- Dual M.2 SSDs 128GB-4TB Max, Select Processors 64GB eMMC Storage
- Two Models: Base (CMCM2FB) / Video Capture Audio (CMCM2FBAV)

Front: CMCM2FB and CMCM2FBAV

Back: CMCM2FB: Base

Back: CMCM2FBAV: Video Capture Audio

Simply NUC Services
You can order this NUC in your various configurations, as well as your corporate OS Image loaded and ready to deploy.

Chassis Technical Specifications

Storage Capabilities
- One M.2 22x80 key M slot for PCIe x4 NVMe or SATA SSDs
- One M.2 22x80 key M slot for SATA SSDs
- Intel® Optane™ Memory H10 With Solid State Storage ready

Audio
- Up to 7.1 multichannel (or dual 8-channel) digital audio via HDMI

Hardware Management Features
- Trusted Platform Module (TPM) 2.0
- AMT supported Ethernet Controller
- Voltage and temperature sensing
- ACPI-compliant power management control

Peripheral Connectivity
- Intel® UHD Graphics 620 (Intel® Core™ processors) or Intel® UHD Graphics 610
- Intel® i219-LM 10/100/1000 Mbps RJ45 Ethernet; 2nd Intel® i211-AT 10/100/1000 Mbps RJ45 Ethernet
- Three USB 3.1 gen 2 type A ports (one front panel port and two back panel ports)
- Three USB 2.0 type A ports (one front panel port and two back panel ports
- Display Emulation (headless display, virtual display, persistent displays)

Video Ports
- Two HDMI 2.0a ports with CEC support for dual 4K@60Hz

Front Panel Header
- Front panel header (with Vcc5/1A, 5Vsby2A, 3.3Vsby/1A)

CMCM2FBAV Additional Features
- HDMI Video Capture up to 1080p with HDMI Passthrough
- 3.5mm Audio In and Out jacks

Baseboard Power Requirements
- 19V, 90W AC-DC power adapter with detachable power cord.
- Includes geo-specific AC cords (IEC C5 connector)

Mechanical Chassis Information
- 7.9" x 5.9" x 1.4" (200 x 150 x 36 mm, (plus rubber feet height)
- VESA Mount Kit (Plate and Screws) mechanical support for power supply adapter
- 1.9kg (4.2lbs) Fully-Assembled with Antennas (no power adapter)

Certification and Regulations

Product Safety Regulations and Standards
- IEC/EN/UL 60950-1
- IEC/EN/UL 62368-1

Environment Operating Temp
- 0° C to +35° C
- Non-condensing Humidity

Storage Temperature
- -20° C to +70° C

EMC/RF Regulations and Standards (Class B)
- FCC Part 15B
- CISPR/EN 55032/55024
- ICES-003
- VCCI 32
- BSMI CNS 13438
- KN 32/35
- AS/NZS CISPR 32
- EN 300 328
- EN 301 893
- EN 300 440
- EN 301 489-1/3/17
- EN 62311
- AS/NZS 4268
- AS/NZS 2772.2
- ARPANSA

Environmental Regulations
- EU RoHS
- China RoHS
- Taiwan BSMI RoHS
- REACH

Certified Operating Systems
- Windows 10 64-bit (Pro & Home)
- Windows 10 IoT Enterprise - (64-bit only) CBB and LTSB
- Windows Server 2016
- Various Linux including: (Contact Simply NUC for specifics)

CM8xCB - Intel® NUC8 Compute Element

Modular Customization

Intel® NUC Elements are an entirely new way to design and build embedded solutions and Mini PCs. Compute element options along with a series of Intel-designed components, deliver the flexibility of modular computing letting you create the exact systems you want. Intel NUC Compute Elements include processor, graphics and memory, allowing you to develop innovative solutions. Start with a compute element with the exact processor you need and plug it into your choice of chassis module. By transforming how systems can be built and serviced, Intel is once again revolutionizing computing in order to help you succeed. From embedded deployments to rugged systems in unique environments, to full systems in a business or vertical environment, the Intel NUC Elements let you deliver custom solutions with minimal R&D time.

Build Scalable Modular Solutions

Housed in a tiny encapsulated board, the compute element provides many options that allow you to scale up from entry to high performance solutions, all with the same chassis module design. The seven compute element options provide scalability in performance from Celeron up to Core i7 with vPro, and are qualified for 24/7 operation, making it the ideal modular solution to keep edge analytics, digital signage, or surveillance cameras up and running around the clock. From generation to generation, Intel is committed to preserve the form factor and pin-out of the compute element for upgradability in existing chassis modules. All elements carry a 3-year warranty, for performance that's designed to last.

Highlighted features
- Intel® NUC Compute Element (U-Series)
- Intel® HD Graphics 610/620
- 4GB-8GB DDR4 (Soldered Down)
- Select SKUs with 64GB eMMC Storage (Pentium and Celeron SKUs only)
- Intel® Dual Band Wireless-AC
- Intel® Bluetooth 5.1
- Windows 10 & Linux operating Systems Supported
- Support for up to triple 4k@60Hz Displays (DDI plus eDP interfaces)
- Generation agnostic heat-spreader Thermal interface
- Supports integration into both stationary and mobile designs
- Qualified for 24x7 operation
- Three-year Product Life Cycle
- Extended warranty options (5-, 3-, 1-year)

Customization
- Wide selection of 8th Gen Intel® Processors

Simply NUC Services
You can order this NUC in your various configurations, as well as your corporate OS Image loaded and ready to deploy.

Compute Element Specifications

Intel® NUC 8 Compute Element (U-Series)

- 8th Generation Intel® Core™ i7-8665U (CM8v7CB)
  1.9 GHz – 4.8 GHz Turbo, 4 Core, 8 Thread, 8MB Cache, 15W
  Intel® vPro™ Technology, Intel® AMT, TPM 2.0, 8GB
  LPDDR3 Intel® UHD Graphics 620, 300 MHz - 1150 MHz

- 8th Generation Intel® Core™ i7-8565U (CM8i7CB)
  1.8 GHz – 4.6 GHz Turbo, 4 Core, 8 Thread, 8MB Cache,
  15W, 8GB LPDDR3, Intel® UHD Graphics 620, 300 MHz -
  1150 MHz

- 8th Generation Intel® Core™ i5-8365U (CM8v5CB)
  1.6 GHz – 4.1 GHz Turbo, 4 Core, 8 Thread, 6MB Cache, 15W
  Intel® vPro™ Technology, Intel® AMT, TPM 2.0, 8GB
  LPDDR3 Intel® UHD Graphics 620, 300 MHz - 1100 MHz

- 8th Generation Intel® Core™ i5-8265U (CM8i5CB)
  1.6 GHz – 3.9 GHz Turbo, 4 Core, 8 Thread, 6MB Cache,
  15W, 8GB LPDDR3, Intel® UHD Graphics 620, 300 MHz -
  1100 MHz

- 8th Generation Intel® Core™ i3-8145U (CM8i3CB)
  2.1 GHz – 3.9 GHz Turbo, 2 Core, 4 Thread, 4MB Cache,
  15W, 4GB LPDDR3, Intel® UHD Graphics 620, 300 MHz -
  1000 MHz

- Intel® Pentium® Gold 5405U (CM8PCB)
  2.3 GHz, 2 Core, 4 Thread, 2MB Cache, 15W, 4GB LPDDR3
  Intel® UHD Graphics 610, 300 MHz - 950 MHz, 64GB eMMC

- Intel® Celeron® 4305U (CM8CCB)
  2.2 GHz, 2 Core, 2 Thread, 2MB Cache, 15W, 4GB LPDDR3
  Intel® UHD Graphics 610, 300 MHz - 900 MHz, 64GB eMMC

Family Features

- Intel® Wireless-AC 9560 soldered-down, 802.11ac 2x2
  1.73Mbps + Bluetooth® 5.1
- 4 to 8GB soldered-down, dual-channel Memory
  - Core i7 and Core i5 SKUs – 8GB LPDDR3
  - Core i3, Pentium, and Celeron SKUs – 4GB
    LPDDR3
- Pentium® and Celeron® with 64GB eMMC Storage
- Windows 10 & Linux operating systems supported
- Support for up to triple 4k@60Hz displays (dual DDI plus eDP
  interfaces)
- Generation agnostic heat-spreader thermal interface
- Supports integration in to both stationary and mobile system
  designs
- Element dimensions: 95 x 65 x 6 mm
- No moving parts
- Qualified for 24x7 operation
- Three Year Product Life Cycle
- Three Year Warranty

I/O Support by Element

- 4 - USB 3.1
- 3 - USB 2.0
- 2 - DDI (configurable as DP/HDMI
- 1 - eDP
- 1 - GbE PHY
- 1 - PCIe x4/SATA
- 1 - PCIe x4
- 1 - HD Audio
- 1 - eSPI (EC Interface)

Dimensions

- 3.7" x 2.5" x .2"
  (95 x 65 x 6 mm)
- no moving parts

System Bios

- Advanced configuration and
  power interface V3.0b,
  SMBIOS2.5
- Intel® Visual BIOS
- Intel® Express BIOS update
  Support
- Windows 10 & Linux operating
  systems supported

Hardware Management Features

- Trusted Platform Module
  (TPM) 2.0
- AMT supported Ethernet
  Controller
- Voltage and temperature
  sensing
- ACPI-compliant power
  management control

Certification and Regulations

Product Safety Regulations and Standards

- IEC 60950-1
- UL 60950-1
- EN 60950-1
- CAN/CSA-C22.2 No. 60950-1

Environment Operating Temp

- 0° C to +40° C
- Non-condensing Humidity
  Storage Temperature
- -20° C to +70° C

EMC/RF Regulations and Standards (Class B)

- CISPR 52
- FCC CFR Title 47,
  Chapter I, Part 15,
  Subparts B, C, E
- ICES-005
- EN 55052
- EN 55024
- ETSI EN 500 528
- ETSI EN 501 489-1
- ETSI EN 501 489-17
- ETSI EN 501 895
- EN 62511
- AS/NZS 2772.2
- AS/NZS 4268
- VCCI V-2, V-5, V-4
- KN-52
- KN-24
- CNS 15458

Environmental Regulations

- RoHS Directive 2011/65/EU
- WEEE Directive 2012/19/EU
- China RoHS

Certified Operating Systems

- Windows 10 (Pro ,Home, IoT e)
- Windows Server 2016
- Ubuntu, Mint, openSUSE, etc
  (Contact Simply NUC for specifics)