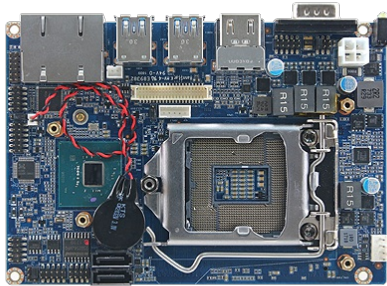




ECM-CFS

8th/9th Gen Coffee Lake-S 3.5" Micro Module



- > Top Layer Soldered Socket
- > Intel® Core™/Pentium®/Celeron® rPGA Processor
- > Intel® Q370/H310 Express Chipset
- > Intel® UHD Graphics 630/610
- > Single DRAM Socket, Max. Up to 32GB DDR4 2666MHz
- > Triple Display (Dual HDMI, LVDS)
- > Single Expansion Slot, mPCIe
- > Dual Gigabit Ethernet, HD Audio Code
- > RAID 0/1, fTPM 2.0

+ Spec

-System Information-	
Processor	Intel® Core™ i7-8700T Processor (12M Cache, up to 4.00 GHz) Intel® Core™ i5-8500T Processor (9M Cache, up to 3.50 GHz) Intel® Core™ i3-8100T Processor (6M Cache, 3.10 GHz) Intel® Pentium® Gold G5400T Processor (4M Cache, 3.10 GHz) Intel® Celeron® G4900T Processor (2M Cache, 2.90 GHz) Intel® Core™ i7-9700TE Processor (12M Cache, up to 3.80 GHz) Intel® Core™ i5-9500TE Processor (9M Cache, up to 3.60 GHz) Intel® Core™ i3-9100TE Processor (6M Cache, up to 3.20 GHz)
Platform Controller Hub	Intel® Q370 Express Chipset Intel® H310 Express Chipset
System Memory	1 x 260-Pin SO-DIMM Socket, Max. Up to 32GB DDR4 2400/2666MHz
BIOS Information	AMI UEFI BIOS, 256 Mbit SPI Flash ROM
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec.
H/W Status Monitor	Monitoring System Temperature, Voltage and FAN Status with Auto Throttling Control
TPM	TPM 2.0 (Firmware)
Expansion	
Expansion	1 x Mini PCIe (mSATA) (Q370 w/PCIe/SATA/USB 2.0) (H310 w/SATA/USB2.0)
Storage	
Storage	1 x mSATA 2 x SATA III
I/O	
USB Port	2 x USB 2.0 4 x USB 3.1 (w/Q370 Gen2, w/H310 Gen1)
COM Port	2 x RS-232
GPIO	1 x 8bit GPIO
MIO	1 x LPC 1 x SPI
System Control	
LED Indicator	1 x Power on/off LED on Rear side 1 x Storage Access LED on Rear side
Display	
Graphic Chipset	Intel® UHD Graphics 630 (i7-8700T,i7-9700TE, i5-8500T,i5-9500TE, i3-8100T,i3-9100TE) Intel® UHD Graphics 610 (Pentium G5400T, Celeron G4900T)
Spec. & Resolution	Dual HDMI 1.4: Max. Resolution 4096x2304@30Hz LVDS: Max. Resolution 1920x1080@60Hz
Multiple Display	Q370 support Triple Display H310 only support Dual Display:LVDS+HDMI1(default LVDS enable)or HDMI1+HDMI2(LVDS disabled)
Audio	
Audio Codec	Realtek ALC888S
Audio Interface	Mic-In, Line-In, Line-Out
Certifications	
Certification Information	CE FCC Class B
Ethernet	
LAN Chipset	1 x Intel® I210AT 1 x Intel® I219LM
Ethernet Interface	10/100/1000 Base-Tx GbE compatible



LAN Port	2 x RJ-45
Mechanical & Environmental	
Operating Temperature	0°C ~ 60°C (32°F ~ 140°F), with 0.2m/s air flow
Storage Temperature	-40°C ~ 75°C (-40°F ~ 167°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Weight	0.44lbs (0.2kg)
Vibration Test	With SSD : 5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30min/axis
Shock Test	With SSD : 10Grms, IEC 60068-2-27, Half Sine, 11ms
Drop Test	ISTA 2A, IEC-60068-2-32 Test : Ed
Power Requirement	+12V
ACPI	Single Power ATX Support S0, S1, S3, S4, S5 ACPI 5.0 Compliant
Power Mode	AT/ATX
Dimension (L x W)	5.7" x 4" (146mm x 101mm)
Software Support	
OS Information	Win 10 Linux
Ordering Information	
Ordering Information	<p>ECM-CFS-Q37-B2R 3.5" SBC with Intel® 8th Generation Coffee Lake Processor & PCH Q370</p> <p>ECM-CFS-H31-B2R 3.5" SBC with Intel® 8th Generation Coffee Lake Processor & PCH H310</p> <p>ACC-CPU-9700TER Intel Core i7-9700TE 1.8GHz Processor(12M Cache, up to 3.80 GHz)</p> <p>ACC-CPU-9500TER Intel Core i5-9500TE 2.2GHz Processor(9M Cache, up to 3.60 GHz)</p> <p>ACC-CPU-9100TER Intel Core i3-9100TE 2.2GHz Processor(6M Cache, up to 3.20 GHz)</p> <p>ACC-CPU-8700TR Intel® Core™ i7-8700T Processor (12M Cache, up to 4.00 GHz)</p> <p>ACC-CPU-8500TR Intel® Core™ i5-8500T Processor (9M Cache, up to 3.50 GHz)</p> <p>ACC-CPU-8100TR Intel® Core™ i3-8100T Processor (6M Cache, 3.10 GHz)</p> <p>ACC-CPU-G5400TR Intel® Pentium® Gold G5400T Processor (4M Cache, 3.10 GHz)</p> <p>ACC-CPU-G4900TR Intel® Celeron® G4900T Processor (2M Cache, 2.90 GHz)</p>