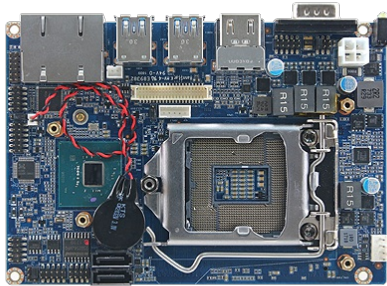




## ECM-CFS

### 3.5" SBC with Intel® 8th/9th Generation Coffee Lake-S Processor & PCH Q370/H310



- > Intel® 8<sup>th</sup> / 9<sup>th</sup> Generation Coffee Lake-S Processor
- > Intel® Q370/H310 Express Chipset
- > Memory Max. Up to 16GB DDR4 2666
- > Intel® UHD Graphics 630/610
- > Triple Display, 2-HDMI, 18/24-bit 2-CH LVDS
- > Intel® Gigabit LAN Controller
- > mPCIe Expansion Slot
- > Support RAID 0/1
- > TPM 2.0 (Firmware)

#### + Spec

| System                       |  |
|------------------------------|--|
| <b>Processor</b>             | Intel® Core™ i7-8700T Processor (12M Cache, up to 4.00 GHz)<br>Intel® Core™ i5-8500T Processor (9M Cache, up to 3.50 GHz)<br>Intel® Core™ i3-8100T Processor (6M Cache, 3.10 GHz)<br>Intel® Pentium® Gold G5400T Processor (4M Cache, 3.10 GHz)<br>Intel® Celeron® G4900T Processor (2M Cache, 2.90 GHz)<br>Intel® Core™ i7-9700TE Processor (12M Cache, up to 3.80 GHz)<br>Intel® Core™ i5-9500TE Processor (9M Cache, up to 3.60 GHz)<br>Intel® Core™ i3-9100TE Processor (6M Cache, up to 3.20 GHz) |
| <b>System Chipset</b>        | Intel® Q370/H310 Express Chipset   |
| <b>System Memory</b>         | 1 x 260-pin SODIMM Socket Up to 16GB DDR4 2400/2666MHz   |
| <b>BIOS</b>                  | AMI UEFI BIOS, 256 Mbit SPI Flash ROM  |
| <b>Watchdog Timer</b>        | H/W Reset, 1sec. ~ 65535sec.   |
| <b>H/W Status Monitor</b>    | Monitoring CPU & System Temperature and Voltage  |
| <b>TPM</b>                   | TPM 2.0(Firmware)  |
| Expansion                    |  |
| <b>Expansion</b>             | 1 x Mini PCIe (mSATA)<br>(Q370 w/PCIe/SATA/USB 2.0)<br>(H310 w/SATA/USB2.0)  |
| Storage                      |  |
| <b>Storage</b>               | 1 x mSATA<br>2 x SATA III  |
| I/O                          |  |
| <b>USB</b>                   | 2 x USB 2.0<br>4 x USB 3.1 (w/Q370 Gen2, w/H310 Gen1)  |
| <b>COM Port</b>              | 2 x RS-232   |
| <b>MIO</b>                   | 1 x LPC<br>1 x SPI   |
| <b>GPIO</b>                  | 1 x 8bit GPIO  |
| Display                      |  |
| <b>Chipset</b>               | Intel® UHD Graphics 630 (i7-8700T,i7-9700TE, i5-8500T,i5-9500TE, i3-8100T,i3-9100TE)<br>Intel® UHD Graphics 610 (Pentium G5400T, Celeron G4900T)   |
| <b>Resolution</b>            | Dual HDMI: Max. resolution 4096x2304 @ 30Hz<br>LVDS: Max. resolution 1920x1080 @ 60Hz  |
| <b>Multiple Display</b>      | Triple Display (2 x HDMI, 1 LVDS)  |
| Audio                        |  |
| <b>Chipset</b>               | Realtek ALC892   |
| <b>Audio Interface</b>       | Mic-In, Line-In, Line-Out  |
| Ethernet                     |  |
| <b>Chipset</b>               | 1 x Intel® I211AT<br>1 x Intel® I219LM   |
| <b>Ethernet Interface</b>    | 10/100/1000 Base-Tx GbE compatible   |
| <b>LAN Port</b>              | 2 x RJ-45  |
| Mechanical & Environmental   |  |
| <b>Power Requirement</b>     | +12V   |
| <b>ACPI</b>                  | Single Power ATX Support S0, S1, S3, S4, S5<br>ACPI 3.0 Compliant  |
| <b>Power Type</b>            | AT/ATX   |
| <b>Operating Temperature</b> | 0°C ~ 60°C (32°F ~ 140°F)  |



|                                  |  |
|----------------------------------|--|
| <b>Storage Temperature</b>       | -40°C ~ 75°C (-40°F ~ 167°F)   |
| <b>Operating Humidity</b>        | 40°C @ 95% Relative Humidity, Non-condensing                             |
| <b>Dimension (L x W)</b>         | 5.7" x 4" (146mm x 101mm)  |
| <b>Weight</b>                    | 0.44lbs (0.2kg)  |
| <b>Certifications</b>            |  |
| <b>Certification Information</b> | CE, FCC Class B  |
| <b>Software Support</b>          |  |
| <b>OS Information</b>            | Win 10, Linux  |
| <b>System Control</b>            |  |
| <b>LED Indicator</b>             | 1 x Power on/off LED on Rear side<br>1 x Storage Access LED on Rear side |

### + Ordering

ECM-CFS-Q37-A1R  
3.5" SBC with Intel® 8th Generation Coffee Lake Processor & PCH Q370

ECM-CFS-H31-A1R  
3.5" SBC with Intel® 8th Generation Coffee Lake Processor & PCH H310

ACC-CPU-8700TR  
Intel® Core™ i7-8700T Processor (12M Cache, up to 4.00 GHz)

ACC-CPU-8500TR  
Intel® Core™ i5-8500T Processor (9M Cache, up to 3.50 GHz)

ACC-CPU-8100TR  
Intel® Core™ i3-8100T Processor (6M Cache, 3.10 GHz)

ACC-CPU-G5400TR  
Intel® Pentium® Gold G5400T Processor (4M Cache, 3.10 GHz)

ACC-CPU-G4900TR  
Intel® Celeron® G4900T Processor (2M Cache, 2.90 GHz)