

# eDM-COMB-CRF6

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## FEATURES

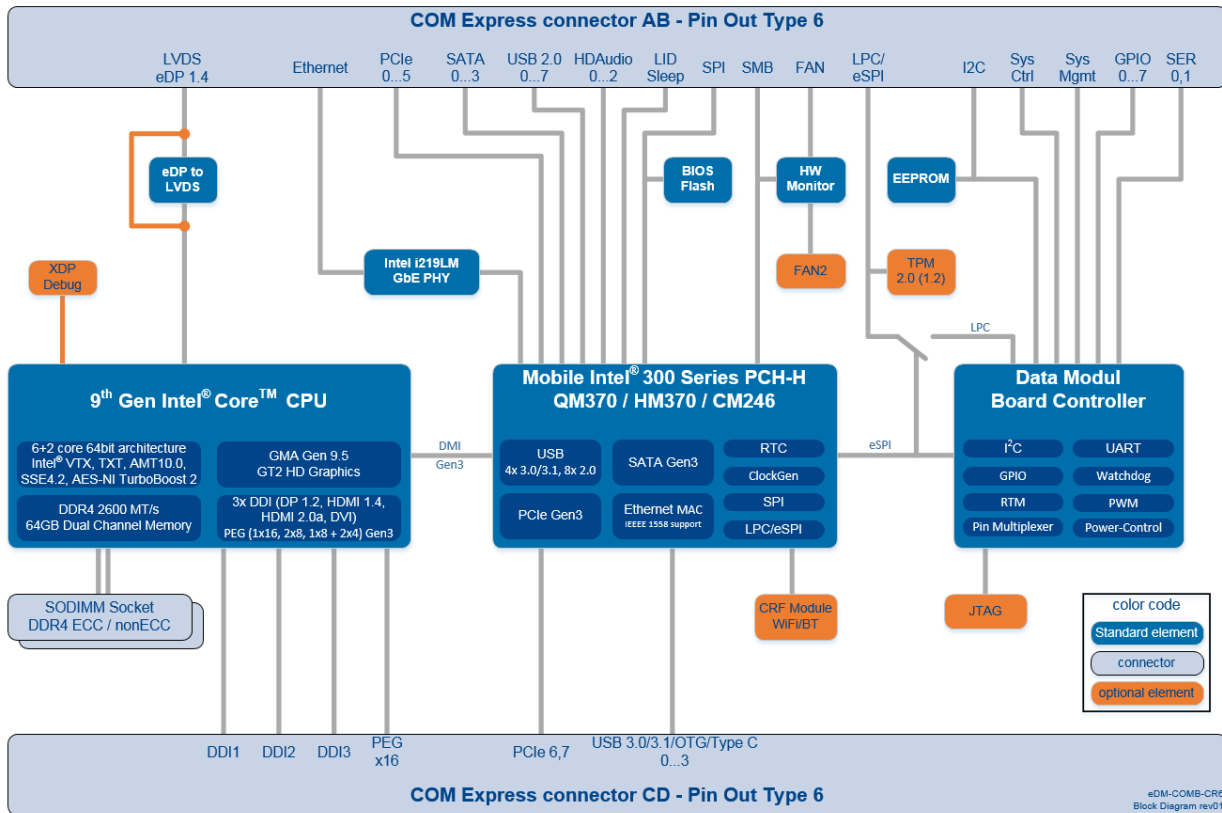
- > COM Express® Basic Size (95 x 125 mm), Type 6 Connector Layout
- > 9th Gen. Intel® Core® processor up to 4.5 GHz with 6 Cores
- > Up to 32 GB DDR4 memory, ECC/Non-ECC
- > 3 independent displays up to 4k resolution

# TECHNICAL INFORMATION

<b>Formfactor</b>	COM Express™ Basic, (95 x 125 mm), Type 6 Connector Layout
<b>CPU</b>	<p>Intel® Xeon® E-2276ME 2.8 GHz/4.5 GHz (Turbo), 6C/GT2-P630, 12 MB Last Level Cache, TDP 45W   35W, ECC support</p> <p>Intel® Core® i7-9850HE 2.7 GHz/4.4 GHz (Turbo), 6C/GT2-630, 9 MB Last Level Cache, TDP 45W   35W</p> <p>Intel® Core® i3-9100HL 1.6 GHz/2.9 GHz (Turbo), 4C/GT2-630, 6 MB Last Level Cache, TDP 25W</p> <p>Supports: Intel® VT, Intel® TXT, Intel® SSE4.2, Intel® HT Technology, Intel® Turbo Boost Technology 2.0, Intel® AVX2, Intel® AES-NI, PCLMULQDQ Instruction, Intel® Secure Key and Intel® TSX-NI, integrated Intel® Gen 9.5 Graphics Processing Unit (GT2)</p>
<b>Memory</b>	2 x SO-DIMM Socket: DDR4 up to 32GByte (2666MT/s), Intel® Xeon® with ECC support
<b>Chipset</b>	Mobile Intel® 300 Series Chipset QM370, HM370 and CM246
<b>Graphics</b>	<p>Intel® Gen 9.5 Graphics Processing Unit (GT2) with OpenCL 2.1, OpenGL 4.5 and DirectX12</p> <p>up to 3 independent displays with up to 4k resolution, HDCP 2.2( Integrated), DP alt-mode on USB type-C</p> <p>Video Decode: H.265/HEVC @ level 5.1 (4k), H.264/AVC @ Level 5.1(4k), VC-1, WMV9, JPEG, VP8/VP9, MPEG2</p> <p>Video Encode: H.265/HEVC @ level 5.1 (4k), H.264/AVC @ Level 5.1(4k), WMV9, JPEG, VP8/VP9, MPEG2</p>
<b>Display Interfaces</b>	<p>3 x DDI (DP++, HDMI, DVI) / up to 4k resolution</p> <p>DP 1.2 with support for Multi-Stream Transport, up to 4096 x 2304 Pixel (@60Hz with HDR)</p> <p>HDMI 2.0a (with external level shifter), up to 4096 x 2160 Pixel (@60Hz with HDR)</p> <p>HDMI 1.4, up to 4096 x 2160 Pixel (@60Hz with HDR)</p> <p>1 x Dual Channel 24 Bit LVDS up to 1920 x 1200 Pixel or optional eDP 1.4 up to 4096 x 2304 Pixel (@60Hz with HDR)</p>
<b>Ethernet</b>	<p>Intel® I219-LM GbE LAN Controller with AMT 11 support</p> <p>Optional onboard Intel Wireless-AC (Gigabit wireless speed) , e.g.: Intel Wireless-AC 9560</p>
<b>I/O Interfaces</b>	<p>4 x USB 3.0 (XHCI)/ USB3.1 (10 Gbps) /2 x USB Type-C support</p> <p>8 x USB 2.0 (EHCI), 1 USB OTG support, 2 x UART (COM1/2)</p> <p>8 x PCIe Gen 3.0 lanes (x1/x2/x4 operation), 1x PEG x16 Gen 3.0</p> <p>4 x SATA (6Gb/s), RAID 0,1,5,10 support, Rapid Storage Technology, Smart Response Technology</p> <p>LPC Bus / TPM1.2 / TPM2.0 / GPIOs / SMB 2.0 / I²C Bus</p> <p>IEEE1588 support (Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems)</p> <p>SPI for onboard/external Flash</p> <p>Intel HD Audio</p>
<b>DM Board Controller</b>	Multi Stage Window Watchdog, UART, GPIO, I²C Bus, RTM, Port-Mux, Manufacturing and Board Information, Power Sequencer & Monitor
<b>Power Type</b>	VCC: +12 V (+/-5%), 5V_SB: 5V (+/-5%), Mode: ATX Mode, VCC only without 5V_SB

<b>Operating Systems</b>	Microsoft® Windows 10 (64bit), Microsoft® Windows 10 IoT Enterprise (64bit), Linux
<b>Security</b>	Optionally Trusted Platform Module: TPM 1.2 /TPM 2.0
<b>Temperature Ranges</b>	Operating: 0°C ... +60°C , -40°C ... +85°C (on request), Storage: -20°C ... +80°C
<b>Humidity</b>	Operating: 5 - 90% RH non-condensing, Storage: 5 - 95% RH non-condensing

# BLOCK DIAGRAM



# ORDERING INFORMATION

Model Name	Part Nr.	Description
eDM-COMB-CR6-E-2276ME	12040447	COM Express Type 6 Basic with Intel® Core® E-2276ME, CM246 chipset, ECC
eDM-COMB-CR6-i7-9850HE	12040448	COM Express Type 6 Basic with Intel® Core® i7-9850HE, QM370 chipset
eDM-COMB-CR6-i3-9100HL	12040449	COM Express Type 6 Basic with Intel® Core® i3-9100HL, QM370 chipset

## Accessoires

eDM-COMB-CF6 -CF	12029280	Standard active cooling solution with fan
eDM-COMB-CF6 -CP	12029281	Standard passive cooling solution
eDM-COMB-CF6 -HS	12029282	Standard heat spreader

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