Intel® Celeron® J1900 (Quad Core, 2.0 GHz)

Intel® Core™ i7/i5/i3, Pentium® and Celeron®

Intel® Core™ i5 and Celeron® ULT Processor

***Features***

* W15” light industrial interactive panel PC
* 9 V ~ 30 V wide range DC power input
* Selectable AT/ATX power mode
* Built-in speakers
* One mSATA slot
* IP64 compliant front panel
* IEI One Key Recovery solution alllows you to create rapid OS backup and recovery (suggested with over 4GB storage capacity)

***Specifications***

AFL3-W15C-ULT3

AFL3-W15B-H81

AFL3-W15A-BT

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| **Model** | **AFL3-W15A-BT** | **AFL3-W15B-H81** | **AFL3-W15C-ULT3** |
| LCD | Size | 15.6” |
| Resolution | 1366 x 768 (16:9) |
| Brightness (cd/m²) | 400 |
| Contrast Ratio | 500:1 |
| LCD Color | 16.2M |
| Pixel Pitch (mm) | 0.240 (H) x 0.240 (V) |
| Viewing Angle (H-V) | 170º / 160º |
| Backlight MTBF(hrs) | 50000 (LED backlight) |
| Touch | Touch Screen | 5-wire resistive with RS-232 interface (anti-glare coating), Projected capacitive with USB interface (anti-UV / anti-glare coating) |
| Touch Controller | PenMount DMC9000 / EETI EXC3188 | PenMount DMC9000 / EETI EXC7200 | PenMount DMC9000 / EETI EXC3188 |
| Motherboard | CPU | Intel® Celeron® J1900 (quad core, 2 GHz) | Intel® Core™ i7/i5/i3, Pentium®, Celeron® processor (TDP 35W) | 6th Generation Intel® Core™ i5 and Celeron® on-board processor |
| Chipset | Intel® H81 |
| RAM | One 204-pin 1333 MHz single-channel DDR3L SO- DIMM, 2GB pre-installed (system max. 8GB) | Two 204-pin 1333 MHz single-channel DDR3 SO-DIMM, 4GB pre-installed (system max. 16GB) | Two 260-pin 2133/1867 MHz dual-channel DDR4 SO-DIMMs (system max. 32 GB) |
| Ethernet | 2 x PCIe GbE by RTL8111E controller | 2 x Intel® I211 PCIe GbE controller |
| Audio Codec | ALC892 |
| Storage | 1 x mSATA (E-Window)1 x 2.5” SATA 3Gb/s HDD bay | 1 x mSATA (E-Window)1 x 2.5” SATA 3Gb/s HDD bay1 x M.2 M key PCIe (2280 or 22110) |
| I/O Ports & Switch | 1. x RS-232 COM port (RJ-45 connector) 1 x RS-232/422/485 COM port

(DB-9 connector) (RI/5V/12V) 2 x USB 2.01. x USB 3.1 Gen 1 (5Gb/s)

2 x GbE LAN1 x Power switch 1 x Reset button 1 x AT/ATX switch1 x Audio port (line-out)1 x 9-30V lockable power jack | 1 x RS-232 COM port (DB-9 connector) 1 x RS-232/422/485 COM port(DB-9 connector) (RI/5V/12V) 2 x GbE LAN4 x USB 2.02 x USB 3.1 Gen 1 (5Gb/s) 1 x HDMI output1 x Power switch 1 x Reset button 1 x AT/ATX switch1 x Audio port (line-out)1 x 9-30V lockable power jack | 1 x RS-232 by DB-9 (RI/5V/12V)1 x RS-232/422/485 by DB-9 (RI/5V/12V)2 x GbE LAN4 x USB 3.1 Gen 1 (5Gb/s) 1 x HDMI output1 x Power switch 1 x Reset button 1 x AT/ATX switch1 x 9-30V lockable power jack |
| E-Window Expansion | Yes, optional(full-size mini-PCIe slot with PCIe/SATA/USB) | N/A | Yes, optional(full-size mini-PCIe slot with PCIe/SATA/USB) |
| Audio | AMP 3W + 3W (internal speakers) |
| Camera and Microphone | 2-megapixel with low light function, digital microphone |
| Wireless & Bluetooth | IEEE 802.11a/b/g/n/achalf-size mini-PCIe slot (PCIe signal) | IEEE 802.11 a/b/g/n/ac, Bluetooth V4.0 half-size mini-PCIe slot (PCIe/USB signal) | IEEE 802.11 a/b/g/n/ac, Bluetooth V4.1M.2 slot A+E key 2230 slot (PCIe/USB signal) |
| OSD Function | Software OSD |
| Physical | Front Panel Construction | PC + ABS Plastic |
| Mounting | Panel, Wall, Rack, Stand and Arm VESA 75mm x 75mm / 100mm x 100mm |
| Color | Black C |
| Dimensions (WxHxD)(mm) | 396 x 250 x 53 | 396 x 250 x 59 | 396 x 250 x 64 |
| Cut-out Dimensions (WxH)(mm) | 273 x 226 | 369 x 226 | 369 x 226 |
| Net/Gross Weight (kgs) | 3.3/5.6 | 3.74/5.74 | 4.5/6.5 |
| Environment | Operating Temperature (°C) (Ambient with air flow) | -20°C~50°C | 0°C~50°C | -20°C~50°C |
| Storage Temperature (°C) | -20°C~60°C |
| Humidity | 10% to 95% (non-condensing) |
| IP Level | IP 64 compliant front panel |
| Safety & EMC | CE / FCC |
| Thermal Solution | Fanless | Smart Fan | Fanless |
| Power | Power Requirement | 9 V ~ 30 V |
| Power Consumption | 12V@4.16A (Intel® J1900 CPU with 2GB 1333MHz DDR3 memory) | 12V@6.33A (Intel® Pentium® G3320TE CPU with 4GB 1333 MHz DDR3L memory) | 12V@.6A (Intel® Core™ i5-6300U CPU with 4GB DDR4 2133 MHz DDR4 memory) |

# *Ordering Information*

* **Intel® Celeron® Platform**

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| Part No. | Description |
| AFL3-W15A-BT-J1/PC/2G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 fanless panel PC with Intel® Celeron® J1900 quad core 2 GHz, 802.11a/b/g/n/ac, projected capacitive touch screen, 2GB DDR3L RAM, 2-megapixel camera, microphone, R13 |
| AFL3-W15A-BT-J1/R/2G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 fanless panel PC with Intel® Celeron® J1900 quad core 2 GHz, 802.11a/b/g/n/ac, resistive touch window, 2GB DDR3L RAM, 2-megapixel camera, microphone, R13 |

* **Intel® H81 Platform**

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| --- | --- |
| Part No. | Description |
| AFL3-W15B-H81-P/R/4G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Pentium® G3320TE dual-core processor (2.3 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, resistive touch screen, 2-megapixel camera, microphone, R13 |
| AFL3-W15B-H81-i3/R/4G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Core™ i3-4330T dual-core processor (3.0 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, resistive touch screen, 2-megapixel camera, microphone, R13 |
| AFL3-W15B-H81-i5/R/4G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Core™ i5-4570TE dual-core processor (2.7 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, resistive touch screen, 2-megapixel camera, microphone, R13 |
| AFL3-W15B-H81-P/PC/4G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Pentium® G3320TE dual-core processor (2.3 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, PCAP touch screen, 2-megapixel camera, microphone, R13 |
| AFL3-W15B-H81-i3/PC/4G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Core™ i3-4330T dual-core processor (3.0 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, PCAP touch screen, 2-megapixel camera, microphone, R13 |
| AFL3-W15B-H81-i5/PC/4G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 panel PC with Intel® H81 chipset, Intel® Core™ i5-4570TE dual-core processor (2.7 GHz), TDP 35W, two 2GB DDR3 RAM, 802.11a/b/g/n/ac, PCAP touch screen, 2-megapixel camera, microphone, R13 |

* **Intel® Skylake ULT3 Platform**

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| Part No. | Description |
| AFL3-W15C-ULT3-C/PC/4G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 Panel PC with Intel® 14nm 6th Generation Mobile Celeron®3955U (15W) on-board Processor (ULT), 1\*4GB DDR4 RAM, 802.11a/b/g/n/ac WiFi module, PCAP touch, 2M camera, microphone,with AG,R13 |
| AFL3-W15C-ULT3-C/R/4G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 Panel PC with Intel® 14nm 6th Generation Mobile Celeron®3955U (15W) on-board Processor (ULT), 1\*4GB DDR4 RAM, 802.11a/b/g/n/ac WiFi module, resistive touch, 2M camera, microphone,with AG,R13 |
| AFL3-W15C-ULT3-i5/PC/4G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 Panel PC with Intel® 14nm 6th Generation Mobile Core™ i5-6300U (15W) on-board Processor (ULT), 1\*4GB DDR4 RAM, 802.11a/b/g/n/ac WiFi module, PCAP touch, 2M camera, microphone , with AG, R13 |
| AFL3-W15C-ULT3-i5/R/4G-R13 | Wide 15.6” 400 cd/m² 1366 x 768 Panel PC with Intel® 14nm 6th Generation Mobile Core™ i5-6300U (15W) on-board Processor (ULT), 1\*4GB DDR4 RAM, 802.11a/b/g/n/ac WiFi module, resistive touch, 2M camera, microphone , with AG, R13 |

***Options***

|  |  |  |  |
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| Item | AFL3-W15A-BT | AFL3-W15B-H81 | AFL3-W15C-ULT3 |
| Panel Mounting Kit | AFL3PK-W15A-R10 | AFL3PK-W15A-R10 | AFL3PK-W15A-R10 |
| Wall Mounting Kit | AFLWK-19B |
| Rack Mounting Kit | AFL3RK-W15A-R11 | AFL3RK-W15B-R10 | AFL3RK-W15B-R10 |
| Arm | ARM-11-RS/ARM-31-RS |
| Stand | STAND-A21-R10/ STAND-210-R11/STAND-A19-RS/STAND-C19-R10 |
| Magnetic Card Reader | AFL3P-W10MSR-U-R10 |
| Barcode Scanner | AFL3-2D-R11 |
| RFID Reader (13.56 MHz Mifare Type) (for ATO assembly) | AFL3-MF-RFID-KIT02-R10\*\* | AFL3-MF-RFID-KIT02-R10 | AFL3-MF-RFID-KIT02-R10 |
| \*OS: Win 7 Embedded (64-bit) | AFL3-W07A-BT-WES7P64-R11 (for PCAP touch)AFL3-W07A-BT-WES7E64-R11 (for resistive touch) | AFL3-W15B-H81-WES7P64-R10(for PCAP touch)AFL3-W15B-H81-WES7E64-R10(for resistive touch) | AFL3-W15C-ULT3-WES7P64-R10(for PCAP touch)AFL3-W15C-ULT3-WES7E64-R10(for resistive touch) |
| \*OS: Win 8 Embedded (64-bit) | AFL3-W07A-BT-WE8S64-R10 | N/A | N/A |
| \*OS: Win 10 IoT Enterprise (64-bit) | AFL3-W07A-BT-W10E64-E-R10 | AFL3-W15B-H81-W10E64-V-R10 | AFL3-W15C-ULT3-W10E64-V-R10 |

\*\*RFID is supported after AFL3-xxA-BT R11 version

\*OS image with CD-ROM without storage

**E-Window (for ATO assembly)**

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| Part No. | Description | Supported Model |
| E-MPCIE-LAN-R10 | PCIe Mini card supports 1-port GbE with Realtek RTL8111E controller, with PMS 194C I/O bracket and 250mm cable, | AFL3-W15A-BT-J1/PC/2G-R12\* |
| R10 | AFL3-W15A-BT-J1/R/2G-R12\* |
|  | AFL3-W15C-ULT3-C/R/4G-R10 |
| E-MPCIE-DLAN-R10 | PCIe Mini card supports 2-port GbE with Intel I211 controller, with PMS 194C I/O bracket and 250mm cable, R10 |
| AFL3-W15C-ULT3-i5/R/4G-R10 |
|  |  |
| E-MPCIE-3G-R10 | PCIe Mini card supports 3G WWAN module , with PMS 130C I/O bracket, RF antenna 300mm cable and GSM antenna cable, R10 | AFL3-W15C-ULT3-C/PC/4G-R10AFL3-W15C-ULT3-i5/PC/4G-R10 |
| E-MPCIE-CClink-R10 | PCIe Mini card supports CC-Link Slave interface according to V2.0 and V1.1, with PMS black C I/O bracket and |  |
| 250mm cable, R10 | AFL3-W15C-ULT3-C/R/4G-R10 |
| E-MPCIE-PROFIBUS-R10 |  |
| PCIe Mini card supports universal PROFIBUS DP card for Master or Slave, with PMS black C I/O bracket and | AFL3-W15C-ULT3-i5/R/4G-R10 |
| 250mm cable, R10 | AFL3-W15C-ULT3-C/PC/4G-R10 |
|  | AFL3-W15C-ULT3-i5/PC/4G-R10 |
| E-MPCIE-EtherCAT-R10 | PCIe Mini card supports universal Real-Time Ethernet protocols, with PMS black C I/O bracket and 280mm cable, |
| R10 |  |

\*Installation E-MPCIE-LAN-R10 & E-MPCIE-DLAN-R10 after remove AFL3-USBHUB-R10

# *Packing List*

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Part No. | Q’ty | Remark |
| Round head machine screw | 44003-020041-RS (W15A-BT/15B-H81) | 4 | M2\*4 round head machine screw |
| Pan head machine screw | 44403-040061-RS | 4 | M4\*6 pan head machine screw |
| Fix holder | 46003-009500-RS | 2 |  |
| Power adapter | 63040-010060-120-RS (W15A-BT) | 1 | 60W; Vin: 90V~264V AC; Vout: 12VDC |
| 63040-010096-100-RS | 1 | 96W; Vin: 90V~264V AC; Vout: 12VDC |
| RJ-45 to DB-9 COM port transfer cable | 32005-004600-100-RS(W15A-BT) | 1 | 300mm, 26AWG, (A) D-SUB 9 male, (B) RJ-45 |

RS-232 2 x GbE LAN 2 x USB 3.1 Gen 1 (5Gb/s)

2 x USB 2.0 9 V ~ 30 V DC

RS-232/422/485 Line-out

Digital Microphone

Jack

Power Button

# *AFL3-W15A-BT*

***Fully Integrated I/O***

AT/ATX Switch

2 x GbE LAN

9 V ~ 30 V DC Jack

2 x USB 2.0 RS-232/422/485

2 x USB 3.1 Gen 1 (5Gb/s) Line-out

# *AFL3-15B-H81*

***Fully Integrated I/O***

Power Switch HDMI

RS-232

Reset

2 x USB 2.0

Digital Microphone

AT/ATX Switch

Speaker 2 x GbE LAN

RS-232

9 V ~ 30 V DC Jack

# *AFL3-W15C-ULT3*

***Fully Integrated I/O***

HDMI output

Reset AT/ATX Switch

RS-232/422/485

Digital Microphone

Power Switch 4 x USB 3.1 Gen 1 (5Gb/s)

273

270

100

75

395.89

53

28

***AFL3-W15A-BT Dimensions (Unit: mm)***

369

75

100

366

395.89

59.40

28

***AFL3-W15B-H81 Dimensions (Unit: mm)***

100

369

75

395.89

69.40

66

38 28

***AFL3-W15C-ULT3 Dimensions (Unit: mm)***

366

250.21

250.21

250.21

222.64

75

223

100

75

223

100

75

100

226

226

226