

Aheesa™ ACE

Aheesa™ single board computing edge platform (ACE) with integrated AI modules designed, developed, manufactured and supported from India for OEMs to develop Edge Computing Devices such as Routers, Firewalls, IoT Gateways, RTUs, etc. The platform is designed with flexibility to achieve customized requirements and cost considerations. ACE is a turnkey platform that comes with hardware, software, OS, libraries, drivers and tool-chain required for developing the desired products and solutions.

Many different products/models are derived based on ACE. It integrated a Quad-A53 processor subsystem running at 1.8GHz with built-in Wi-Fi 6 subsystem and networking subsystem. It is suitable for 802.11ax, LTE CAT 4/5, 5G, Edge, Hotspot, VPN, AC(Access Control). It provides a dedicated Hardware Engine for Security Acceleration, Machine Learning and supports Packet Processing with multi-threaded Network Processor. These accelerators relieve the CPU for upper layer applications.

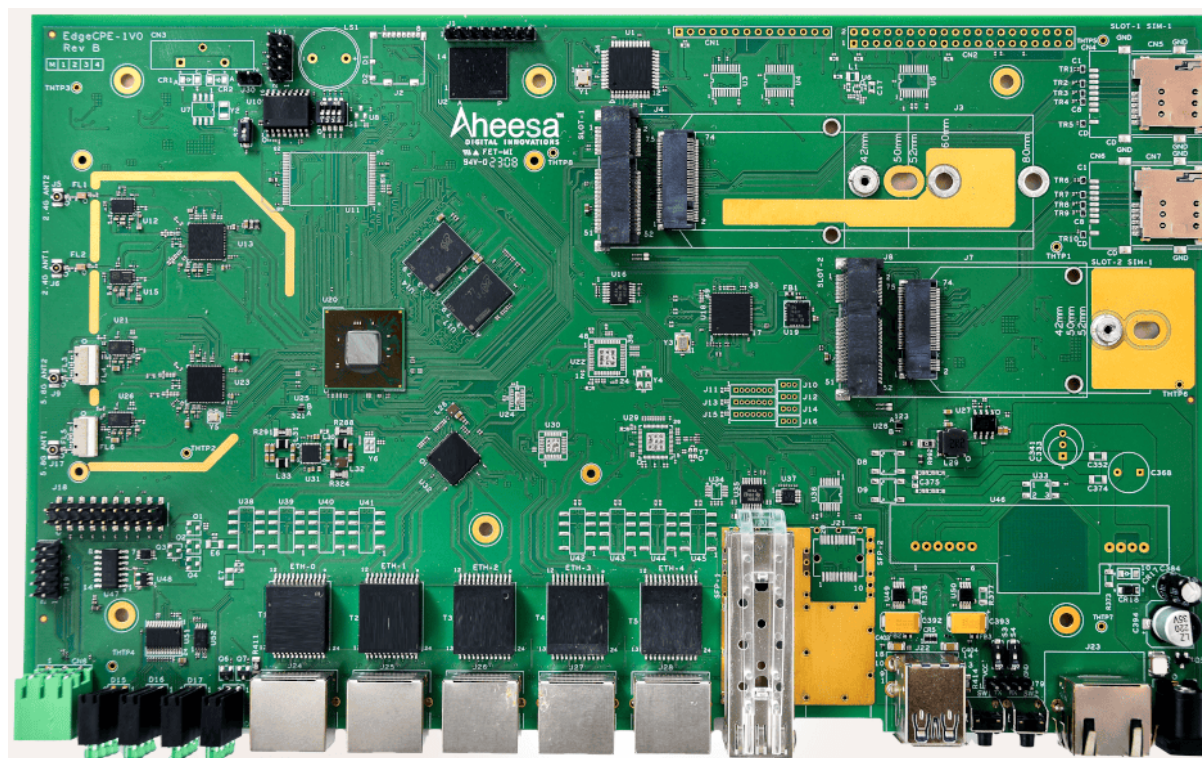
Aheesa™ ACE is a validated platform and is backed with Aheesa™ warranty and guaranteed support. It shortness the product development cycle and helps OEMs to focus on core modules as the integrated platform is provided with a full ecosystem. OEMs can free themselves from OS porting, driver and base library incompatibility issues as Aheesa™ provides an end-to-end integrated platform with hardware, software, OS, libraries, drivers and tool-chain.

Applications

- SDWAN
- Service Delivery Router
- Dual SIM 4G/5G Router
- WiFi6 Edge
- Firewall
- Universal Edge Gateway for IoT and IIoT
- SOHO IPPBX
- BMS Terminal Units
- Multi-WAN Aggregation and Load Balancer
- Network Security Appliance
- Intrusion Detection and Monitoring System
- Intrusion Prevention System
- Real-time Edge Analytics
- Multi-input, multi-sensor data aggregation
- Smart City Applications



Aheesa™ ACE

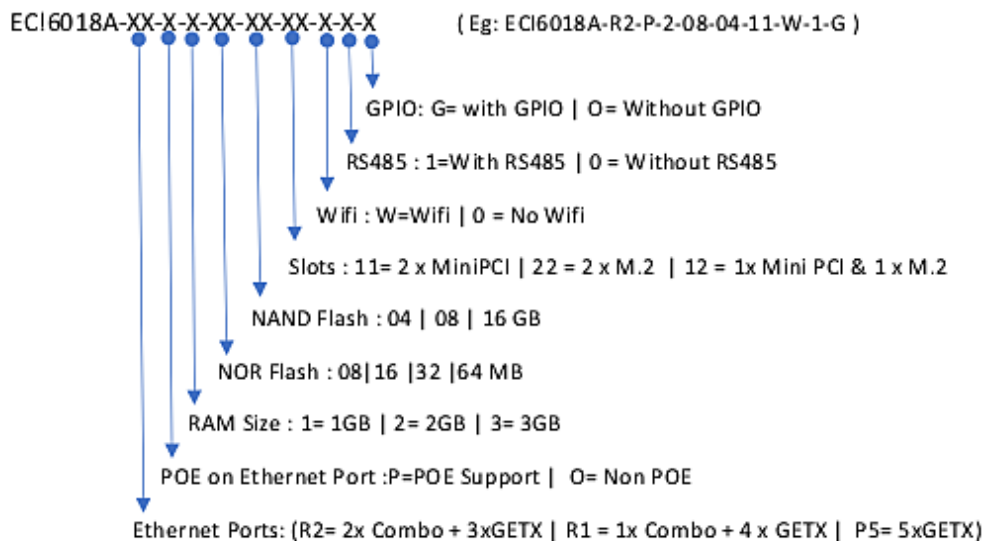


Specifications

Specifications	ECQ6018A-R2	ECQ6018A-R1	ECQ6018A-P5
Processor	SoC: Quad Core ARM A53 at 1.8GHz		
RAM	Default 3GB DDR4 (Optional for 1GB or 2GB)		
NOR Flash	Default 32MB (Optional for 8/16/64MB)		
NAND Flash (On-board)	Default 4GB (Optional 8/16GB)		
Ethernet Port	2 x GE SFP Combo 3 x GE TX	1 x Combo (2.5 GB) 4 x GE TX	5 x GE TX
POE (Optional)	1 st GE TX interface		
Mini PCIe/ M.2 (Optional)	2	2	2
SIM Slot	2/4	2/4	2/4
Wifi (Optional)	802.11ax 2X2/2.4G/HE40, 2X2/5G HE80		
RS485 (Optional)	1	1	1
USB 2.0/3.0	2	2	2
RS232 Console (RJ45)	1	1	1
LED	15 Nos : Power, System, Error, WWAN activity, Programmable LEDs		
Buttons	Reset -1 , WPS -1		
GPIO (optional)	1x 40 pin GPIO Expander connector providing : Two SPI, One I2C, PCM, PWM, UART and GPIOs		
Other Features	Buzzer, RTC, Watchdog Timer, Temp Sensor, Network Bypass		
Power	1x DC Jack Connector: 12V		
Software	Linux/OpenWRT		



Ordering Information: (Part Number)



Interested EMS/OEMs/ODM can partner with Aheesa™ to access the platform their solution needs. For more details, please reach us at aheesa@aheesa.com.

About Aheesa™ Digital Innovations Private Limited

Aheesa™ Digital Innovations Private Limited (a.k.a Aheesa™) established in March 2021, is a prominent Chennai based **"fabless semiconductor"** and a recognized DPIIT organization. Aheesa™ specialises in indigenous designs and its current ASICs and platforms are primed on Telecom, Networking and Cyber Security based on RISC-V architecture. Aheesa™'s notable achievements includes the selection for the Prestigious Design Linked Incentive (DLI) Scheme by the Ministry of Electronics and IT (MeitY), Government of India and its announcement in Semicon India 2023. Aheesa™ is one of the limited hardware and embedded design houses established in India focusing on indigenous designs and committed to **Athmanirbhar** and **"Make in India"** initiative.



