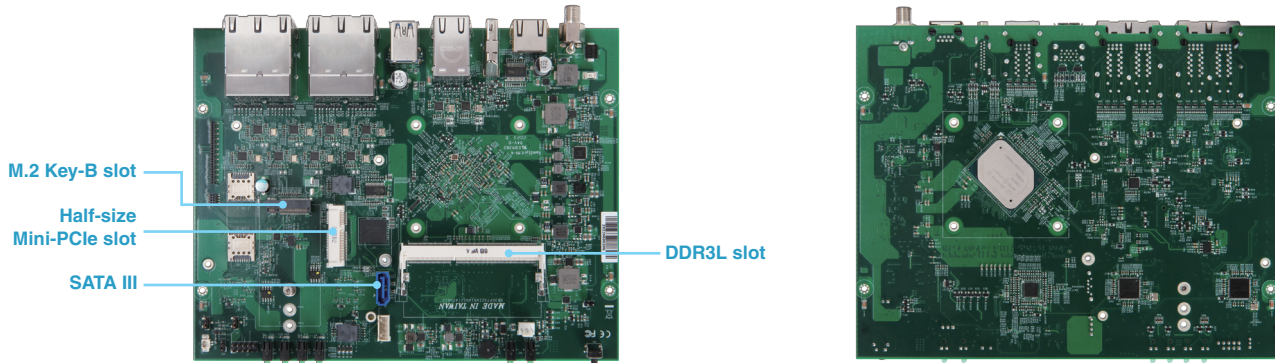




# ANS-2142 Series

Intel® Apollo Lake E3940(4C) / E3930(2C)  
Processor embedded board with  
DDR3L SO-DIMM and 12V DC input



ANS-2142 Series builds on Intel® Apollo Lake E3940 / E3930 processor with up to four CPU cores, 10x GbE ports and PoE+ support. It is suitable for SDN (Software-Defined WAN) application with 5G and Wi-Fi 6 deployment.

## FEATURES

- Intel Atom® E3940(4C)/ E3930(2C) Processor (Apollo Lake)
- 2x GbE RJ45, 8x GbE RJ45 (with PoE+ support by SKU)
- 1x RJ45 Console, 1x HDMI, 2x USB3.0
- 1x DDR3L 1866/1600/1333 MT/s ECC SO-DIMM up to 8GB
- 1x TPM2.0 (on-board)
- 1x eMMC 5.0 16GB (on-board)
- 1x Mini-PCIe (PCIe/ USB2.0), 1x M.2 Key-B Slot (PCIe/ USB3.0), 1x SATA III
- Design ready for 5G and Wi-Fi 6 (802.11ax)



## ORDERING GUIDE

|                 |  |                 |  |                 |  |
|-----------------|--|-----------------|--|-----------------|--|
| <b>AB1-3K26</b> | (R).ANS-2121G. Customized Form Factor mother board. Intel Apollo Lake E3930. Single DDR3L ECC SO-DIMM, SATA, 4*GbE Ports(RJ45), 2*WAN(RJ45), Console(RJ45), 2* USB3.0, miniPCIe, M.2 LTE, SIM Slot, HDMI, TPM2.0 | <b>AB1-3K02</b> | (R).ANS-2141G. Customized Form Factor mother board. Intel Apollo Lake E3930. Single DDR3L ECC SO-DIMM, SATA, 8*GbE Ports(RJ45), 2*WAN(RJ45), Console(RJ45), 2* USB3.0, miniPCIe, M.2 LTE, SIM Slot, HDMI, TPM2.0 | <b>AB1-3K03</b> | (R).ANS-2142G. Customized Form Factor mother board. Intel Apollo Lake E3940. Single DDR3L ECC SO-DIMM, SATA, 8*GbE Ports(RJ45), 2*WAN(RJ45), Console(RJ45), 2* USB3.0, miniPCIe, M.2 LTE, SIM Slot, HDMI, TPM2.0   |
| <b>AB1-3L42</b> | (R).ANS-2122G. Customized Form Factor mother board. Intel Apollo Lake E3940. Single DDR3L ECC SO-DIMM, SATA, 4*GbE Ports(RJ45), 2*WAN(RJ45), Console(RJ45), 2* USB3.0, miniPCIe, M.2 LTE, SIM Slot, HDMI, TPM2.0 | <b>AB1-3K01</b> | (R).ANS-2141H. Customized Form Factor mother board. Intel Apollo Lake E3930. Single DDR3L ECC SO-DIMM, SATA, 8*PoE Ports(RJ45), 2*WAN(RJ45), Console(RJ45), 2* USB3.0, miniPCIe, M.2 LTE, SIM Slot, HDMI, TPM2.0 | <b>AB1-3K00</b> | (R).ANS-2142H. Customized Form Factor mother board. Intel Apollo Lake E3940. Single DDR3L ECC SO-DIMM, SATA, 8*PoE Ports(RJ45), 2*WAN(RJ45), Console(RJ45), 2* USB3.0, miniPCIe, M.2 LTE, SIM Slot, HDMI, TPM2.0 . |

## General

|           |   |
|-----------|---|
| Processor | - Intel® Apollo Lake E3930(2C) for ANS-2121G/41G/41H<br>- Intel® Apollo Lake E3940(4C) for ANS-2122G/42G/42H                    |
| BIOS      | AMI UEFI BIOS   |
| Memory    | 1x DDR3L 1866/1600/1333 MT/s ECC SO-DIMM up to 8GB  |
| Storage   | - eMMC 5.0 16GB (Optional)<br>- 1x SATA III port for 2.5" HDD/SSD or SATADOM  |
| Expansion | - 1x Half-size Mini-PCIe slot with PCIe and USB2.0 signals<br>- 1x M.2 Key-B slot with PCIe and USB3.0 signals<br>- 2x SIM slot |
| Security  | TPM 2.0   |

## External I/O

|                          |                               |
|--------------------------|-------------------------------|
| Console                  | 1x RJ45                       |
| USB                      | 2x USB 3.0                    |
| Ethernet                 | Up to 10x GbE RJ45 (RTL8111H) |
| PoE+ Ethernet (Optional) | 8x GbE RJ45 PoE+              |

## Mechanical

|           |                    |
|-----------|--------------------|
| Dimension | 210(W) X 165(D) mm |
|-----------|--------------------|

## Environmental

|                       |  |
|-----------------------|--|
| Operating Temperature | 0°C ~ 40°C   |
| Storage Temperature   | -10°C ~ 70°C   |
| Relative Humidity     | 10% ~ 90% @ 40°C, non-condensing                         |
| Power Supply          | 12V DC input<br>54V DC input (PoE+ model only)(Optional) |

