# ADE4COM
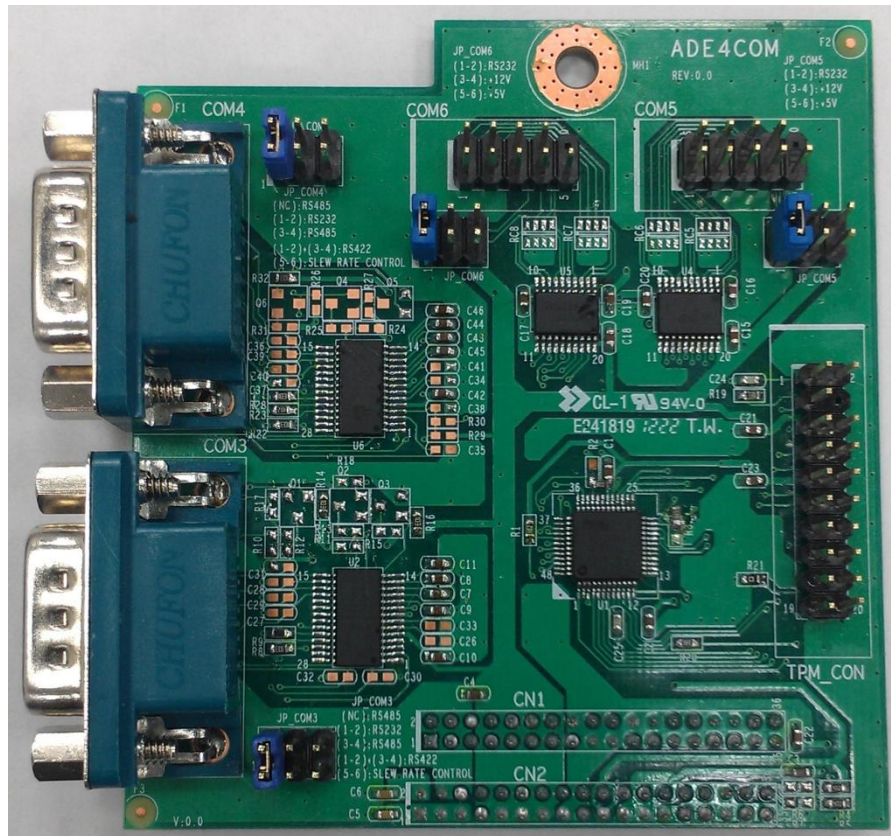
Mini-ITX 4 serial ports Adapter



Dimension：75 × 82 mm

Chipset：Fintek F81216AD LPC to 4 UART

Features：

- Totally provides 4 UART (16550 asynchronous) ports

- Each UART includes 16-byte send/receive FIFO, a programmable baud rate generator, complete modem control capability and an interrupt system.
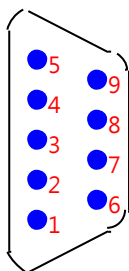
- Baud rate up to 115.2K

- Support 9-bit protocol

- Support RS422/485 function

Connectors＆Pin Definition：
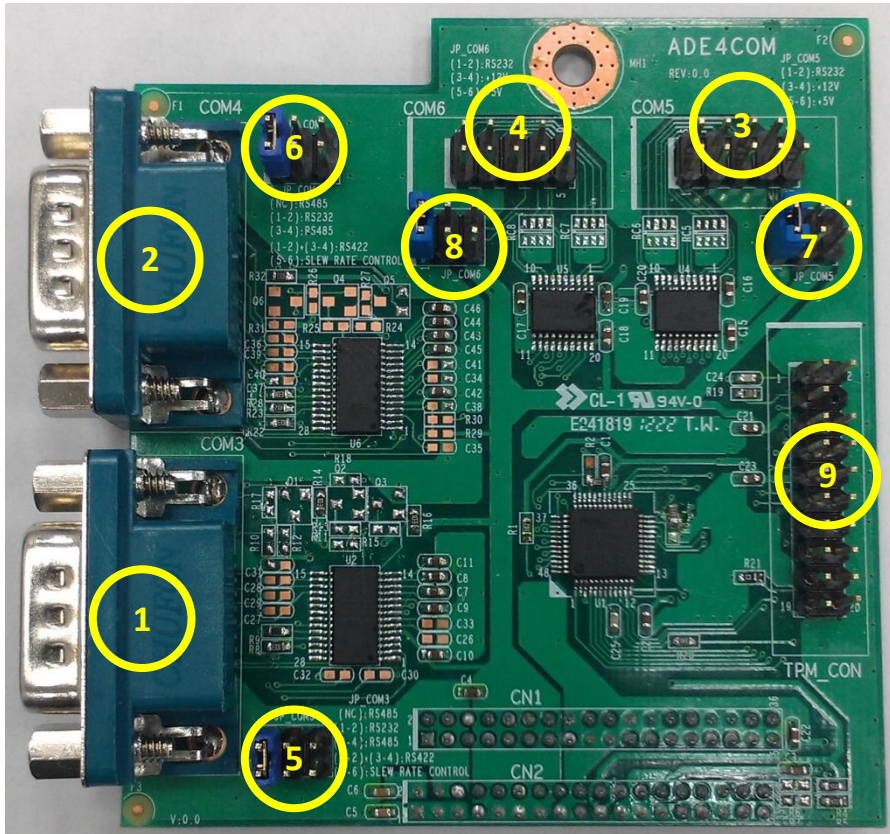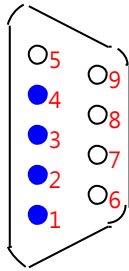


1. COM_A：

- RS232
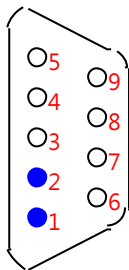


| Pin No. | Pin Definition | Pin No. | Pin Definition |
|---------|----------------|---------|----------------|
| 1 | DCD# | 6 | DSR# |
| 2 | SIN | 7 | RTS# |
| 3 | SOUT | 8 | CTS# |
| 4 | DTR# | 9 | RI# |
| 5 | GND | | |

- RS422



| Pin No. | Pin Definition | Pin No. | Pin Definition |
|---------|----------------|---------|----------------|
| 1 | TX-(B) | 6 | NC |
| 2 | TX+(A) | 7 | NC |
| 3 | RX+(A) | 8 | NC |
| 4 | RX-(B) | 9 | NC |
| 5 | GND | | |

- RS485



| Pin No. | Pin Definition | Pin No. | Pin Definition |
|---------|----------------|---------|----------------|
| 1 | D-(B) | 6 | NC |
| 2 | D+(A) | 7 | NC |
| 3 | NC | 8 | NC |
| 4 | NC | 9 | NC |
| 5 | GND | | |

2. COM_B：Please refer to COM_A

3. COM_C：RS232 only
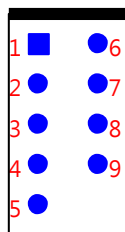


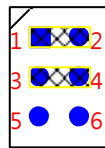| Pin No. | Pin Definition | Pin No. | Pin Definition |
|---------|----------------|---------|----------------|
| 1 | DCD# | 6 | DSR# |
| 2 | SIN | 7 | RTS# |
| 3 | SOUT | 8 | CTS# |
| 4 | DTR# | 9 | RI#/+12V/+5V |
| 5 | GND | | |

4. COM_D：RS232 only, please refer to COM_C

5. JP_COM_A：Select RS232/RS422/RS485
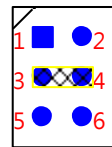
    **–** RS232：1-2 close
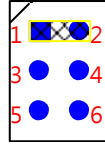


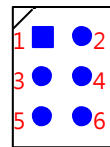    **–** RS422：1-2 and 3-4 close together



    **–** RS485：3-4 close or all open

 Driver           Receiver

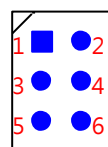    **–** SLEW RATE CONTROL：5-6

    Open：Maximum data rate

    Close：Data rate is 250Kbps

6. JP_COM_B：Select RS232/RS422/RS485, please refer to JP_COM_A

7. JP_COM_C：Select RI#/+12V/+5V



| | |
|---|---|
| 1-2 Close | = RS232 |
| 3-4 Close | = +12V |
| 5-6 Close | = +5V |

8. JP_COM_D：Select RI#/+12V/+5V, please refer to JP_COM_C

9. TPM_CON（Option）:
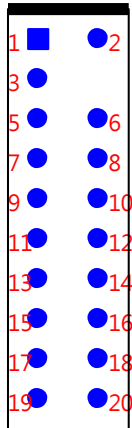
| Pin No. | Pin Definition | Pin No. | Pin Definition |
|---------|----------------|---------|----------------|
| 1 | PCICLK | 11 | LAD0 |
| 2 | GND | 12 | GND |
| 3 | LFRAME# | 13 | NC |
|   |        | 14 | NC |
| 5 | PLTRST# | 15 | +3.3VSB |
| 6 | +5V | 16 | SERIRQ |
| 7 | LAD3 | 17 | GND |
| 8 | LAD2 | 18 | GND |
| 9 | +3.3V | 19 | GPIO0 |
| 10 | LAD1 | 20 | GPIO1 |

# ADE4RTLAN

Mini-ITX 4 LAN ports Adapter
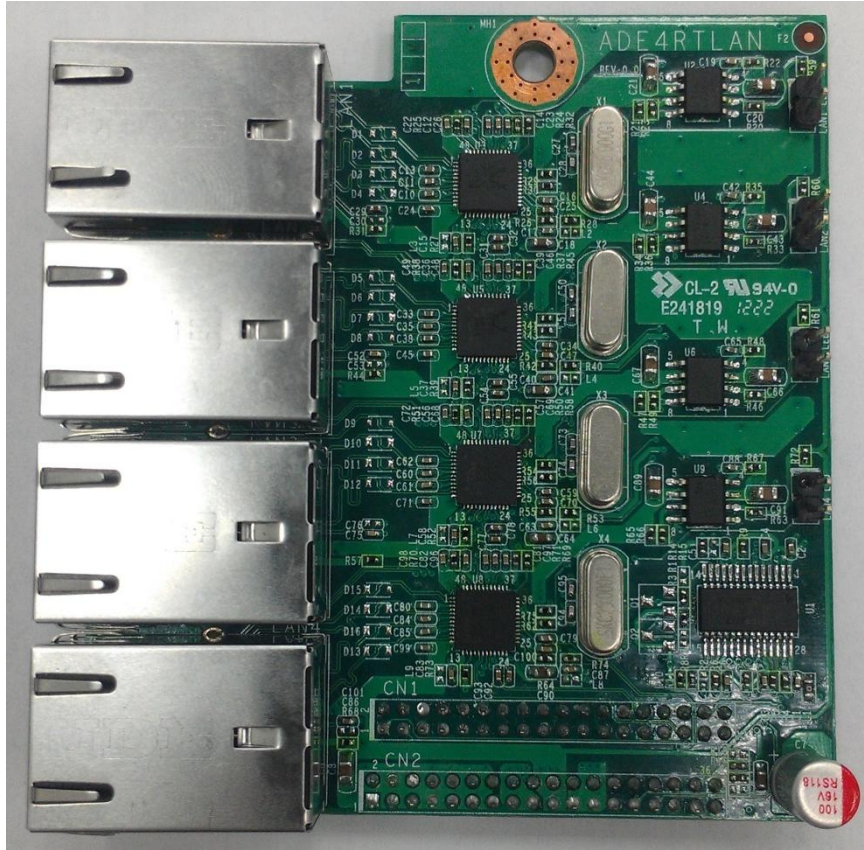


Dimension：75 × 82 mm

Chipset：Realtek RTL8111E-VL-CG PCI Express Gigabit Ethernet Controller

Features：

- Integrated 10/100/1000 transceiver

- Auto-Negotiation with Nxt Page capability

- Supports PCI Express 1.1

- Supports pair swap/polarity/skew correction

- Crossover Detection & Auto-Correction

- Wake-on-LAN and remote wake-up support

- Microsoft NDIS5, NDIS6 Checksum Offload (IPv4, IPv6, TCP, UDP)

and Segmentation Task-offload (Large send v1 and Large send v2)

support

- Support Full Duplex flow control (IEEE 802.3x)

- Support jumbo frame to 9K bytes

- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

- Support IEEE 802.1P Layer 2 Priority Encoding

- Support IEEE 802.1Q VLAN tagging

- Support IEEE 802.3az Draft 3.0 (EEE)

- Transmit/Receive on-chip buffer support

- Support power down/link down power saving

- Support PCI MSI (Message Signaled Interrupt) and MSI-X

- Support quad core Receive-Side Scaling (RSS)

- Support Protocol Offload (ARP & NS)

Connectors＆Pin Definition：
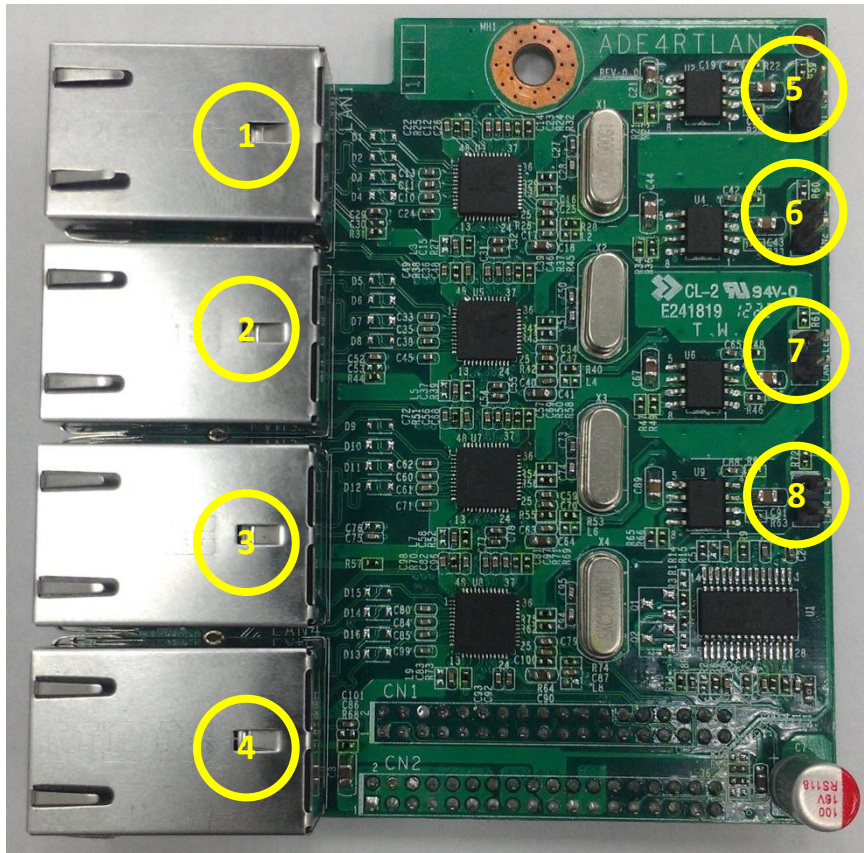


1～4：LANA ~ LAND, 4 RJ45 LAN connectors

5～8：LANA_LED ~ LAND_LED

■ LED Anode
● LED Cathode

# ADE4INLAN

Mini-ITX 4 LAN ports Adapter



Dimension：75 × 82 mm

Chipset：Intel 82574 GbE Controller

Features：

- Programmable host memory receive buffers (256 bytes to 16 KB)

- Intelligent interrupt generation features to enhance driver

performance

- Message Signaled Interrupts (MSI and MSI-X)

- Configurable receive and transmit data FIFO, programmable in

1KB increments

- Flow Control Support compliant with the 802.3X Specification

- VLAN support compliant with the 802.1Q Specification

- Compliant with the 1Gb/s IEEE 802.3 802.3u 802.3ab

Specifications

- IEEE 802.3ab auto negotiation support

- Full duplex operation at 10/100/1000 Mb/s

- Half duplex at 10/100 Mb/s

- Auto MDI, MDI-X crossover at all speeds

- TCP segmentation capability compatible with Large Send

offloading features

- Support up to 256 KB TCP segmentation (TSOv2)

- Fragmented UDP checksum offload for packet reassemble

- IPv4 and IPv6 checksum offload support (receive, transmit, and

large send)

- Receive Side Scaling (RSS) with two hardware receive queues

- 9 KB jumbo frame support

- 40 KB packet buffer size

- NC-SI for remote management core

- Magic Packet* wake-up enable with unique MAC address

- ACPI register set and power down functionality supporting D0

andD3 states

- Full wake up support (APM and ACPI 2.0)

- Smart power down at S0 no link and Sx no link

Connectors＆Pin Definition：
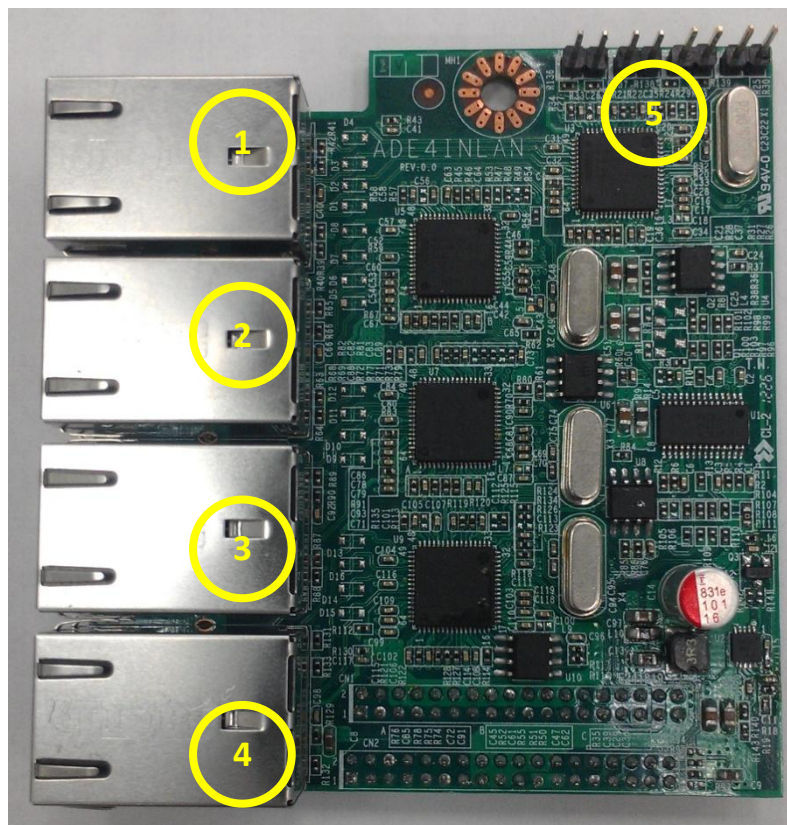


1～4：LANA～LAND, 4 RJ45 LAN connectors

5：LANA_LED～LAND_LED



LED Anode
LED Cathode