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

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Pin Definition</th>
<th>Pin No.</th>
<th>Pin Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DCD#</td>
<td>6</td>
<td>DSR#</td>
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<tr>
<td>2</td>
<td>SIN</td>
<td>7</td>
<td>RTS#</td>
</tr>
<tr>
<td>3</td>
<td>SOUT</td>
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<td>CTS#</td>
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<tr>
<td>4</td>
<td>DTR#</td>
<td>9</td>
<td>RI#</td>
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<tr>
<td>5</td>
<td>GND</td>
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RS422

<table>
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<th>Pin No.</th>
<th>Pin Definition</th>
<th>Pin No.</th>
<th>Pin Definition</th>
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<tbody>
<tr>
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<tr>
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<td>TX+(A)</td>
<td>7</td>
<td>NC</td>
</tr>
<tr>
<td>3</td>
<td>RX+(A)</td>
<td>8</td>
<td>NC</td>
</tr>
<tr>
<td>4</td>
<td>RX-(B)</td>
<td>9</td>
<td>NC</td>
</tr>
<tr>
<td>5</td>
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RS485

<table>
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<th>Pin Definition</th>
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<tr>
<td>2</td>
<td>D+(A)</td>
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<td>NC</td>
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<td>NC</td>
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<tr>
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</table>

2. COM_B : Please refer to COM_A

3. COM_C : RS232 only

<table>
<thead>
<tr>
<th>Pin No.</th>
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<th>Pin No.</th>
<th>Pin Definition</th>
</tr>
</thead>
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<td>8</td>
<td>CTS#</td>
</tr>
<tr>
<td>4</td>
<td>DTR#</td>
<td>9</td>
<td>RI#+/12V/+5V</td>
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<tr>
<td>5</td>
<td>GND</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
   - 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):

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Pin Definition</th>
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<th>Pin Definition</th>
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<td></td>
<td>14</td>
<td>NC</td>
</tr>
<tr>
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<td>+3.3VSB</td>
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<td>GPIO1</td>
</tr>
</tbody>
</table>
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 SignaledInterrupts (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 and D3 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