**ESA-486AVR™**

**Baby-AT form factor Motherboard**

- **CPU**: ZFx86™ System - on-Chip.
  - Includes CPU and Chipset
  - Ultra-low power, less than 1.0W @ 100MHz
  - User selectable CPU speed. Jumper for: 33MHz, 66MHz, 100MHz
- **RAM**: 8MB PC-100 SDRAM on board (32MB and 128MB available)
- **USB**: two on board - ver 1.1
- **Video**: Silicon Motion graphic controller on board; SM712 with internal 4MB memory
- **FCC and CE certification**
- **Baby-AT form factor Motherboard**: 8.6” x 10.2”
  - 8 ISA slots
  - 1 PCI slot
  - one mini-PCI slot
  - AT and ATX power connectors
  - 2 Serial & 1 Parallel (in chipset)
  - 1 FDD
  - 2 IDE - headers on board for the standard primary and secondary
  - **Speaker** on board
  - **Reset Button** on board
  - **Power LED** on board
  - **HDD LED** on board
  - **Watchdog Timer**
  - **GPIO** input set up in a standard format
  - **AT Keyboard** connector
  - **PS/2 KB & mouse** headers
  - **J-TAG, Z-TAG, & GPIO** headers
- **BIOS**: Phoenix
- **DR-DOS 7.0** license included
- **Storage**: bootable CF connector on board (uses no extra memory addresses)
- **Headers**: PS/2 for KB and Mouse, and video DB-15
  * see over for GPIO pinout

**ORDERING INFORMATION:**

- ESA-486AVR-008 – 8MB Memory
- ESA-486AVR-032 – 32MB Memory
- ESA-486AVR-128 – 128MB Memory
- CABLE-ESA9 – Video cable and bracket sold separately

**ESAs** is an industrial computing solution provider. We provide custom industrial workstations, servers, and subsystem solutions to the industrial, medical, municipal, and military sectors. We provide you an ESA decision maker as your central point of contact and apply our 40 years of combined engineering expertise to your unique set of requirements.

**ESA's** industrial motherboards include 486 AT legacy, ATX, single board computers (SBCs), and backplanes. As engineers, we understand the need for long life boards with robust components.

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INFORMATION SUBJECT TO CHANGE WITHOUT NOTICE
**ESA-486AVR  486 Motherboard Standard Jumper Settings**

<table>
<thead>
<tr>
<th>Jumper Header</th>
<th>Jumper Description</th>
<th>Jumper Position - State</th>
<th>Jumper Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>JB6</td>
<td>MINI PCI</td>
<td>JB6_B (B-ON)</td>
<td>![Diagram JB6]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JB7_B (B-ON)</td>
<td>![Diagram JB7]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>JB7_D (D-ON)</td>
<td></td>
</tr>
<tr>
<td>JB8</td>
<td>CMOS CLR/ENA</td>
<td>JB8_B (B-ON)</td>
<td>![Diagram JB8]</td>
</tr>
<tr>
<td>JB9</td>
<td>PCI IDSEL</td>
<td>JB9_0 (AD20-ON)</td>
<td>![Diagram JB9]</td>
</tr>
<tr>
<td>JB10</td>
<td>VGA IDSEL</td>
<td>JB10_4 (AD24-ON)</td>
<td>![Diagram JB10]</td>
</tr>
<tr>
<td>JB11</td>
<td>VGA INTSEL</td>
<td>JB11_A (INT A-ON)</td>
<td>![Diagram JB11]</td>
</tr>
<tr>
<td>HDR8</td>
<td>CF M/S</td>
<td>HDR8_Disabled</td>
<td>![Diagram HDR8]</td>
</tr>
<tr>
<td>ALL OTHER JUMPERS</td>
<td></td>
<td>OFF</td>
<td></td>
</tr>
</tbody>
</table>

*GPIO - 20 pin header (HDR16) includes IR_RXD (pulled up), IR_TXD, PWM, IO_CS0, IO_CS1, IO_CS2, IO_CS3, MEM_CS1, MEM_CS2, MEM_CS3, 5V_VCC, GPIO_0, GPIO_4, GPIO_7, CPU_TRG, and 5 GND connections