The S-DIAS CP 111 CPU module is a high-performance processor unit for the S-DIAS I/O modules. Through various interfaces, such as Ethernet, 2x VARAN, CAN bus, USB and an exchangeable microSD card, this module can be used for a variety of applications. Additionally, a RealTimeClock and zero voltage proof RAM space with buffer battery are provided. To operate the CPU, a voltage supply module is required that also has the USB host and CAN interface.

### Performance Data

<table>
<thead>
<tr>
<th>Processor</th>
<th>EDGE2 Technology</th>
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</table>
| Addressable I/O/P modules | VARAN bus: 65,280
CAN participants: > 100
S-DIAS bus: 64 |
| Internal I/O | no |
| Internal cache | 512-kbyte L2 Cache |
| Internal program and data memory (DDR3 RAM) | 256-Mbyte |
| Internal remnantdata memory | 256-kbyte SRAM (battery buffered) |
| Internal storage device | 512-Mbyte microSD card |
| Interfaces | 1x Ethernet
2x VARAN Out (Manager) (maximum cable length: 100 m)
1x CAN (via PS 101)
1x USB host 2.0 (high speed 480 Mbit/s) (via PS 101)
1x USB device 1.1
1x S-DIAS (with manager) |
| Status display | no |
| Status LEDs | yes |
| Real-time clock | yes (battery buffered) |

### Electrical Requirements

**Module Supply (Input):**
- Supply voltage: +5 V from PS 101

**S-DIAS Bus Supply (Output):**
- Voltage supply from S-DIAS bus: +5 V
- Current consumption on the S-DIAS bus (+5 V supply): typically 400 mA, maximum 450 mA

### Article Number and Miscellaneous

- Article number: 20-004-111
- Article number power supply module: 20-003-101
- Operating system: Salamander
- Dimensions: 12.5 x 104.2 x 72 mm (W x H x D)
- Project backup: internally on the microSD card
- Standard: UL 508 (E247993)
- Approvals: UL, cUL, CE

### Environmental Conditions

- Storage temperature: -20 ... +85 °C
- Environmental temperature: 0 ... +55 °C
- Humidity: 0-95 %, non-condensing
- Operating conditions: pollution degree 2
  altitude up to 2000 m
- EMC resistance: in accordance with EN 61000-6-2 (industrial area)
- EMC noise generation: in accordance with EN 61000-6-4 (industrial area)
- Vibration resistance: EN 60068-2-6
  3.5 mm from 5-8.4 Hz
  1 g from 8.4-150 Hz
- Shock resistance: EN 60068-2-27
  15 g
- Protection type: EN 60529
  IP20