

buslink @C010

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- LVDS @ctiveIO buslink with power supply
- @ctiveIO system bus extension up to 11.25m

Pinout

| | | | |
|---|---|----|----|
| 0 | 4 | 8 | 12 |
| 1 | 5 | 9 | 13 |
| 2 | 6 | 10 | 14 |
| 3 | 7 | 11 | 15 |

| LED | |
|-----|-----------------------------|
| 0 | 3,3V DC |
| 1 | SYNC (no valid buslink) |
| 4 | LOCK (data transmission ok) |

*) see notes



| LVDS | |
|-------|--------------|
| Pin | Signal |
| 1 | RxD + |
| 2 | RxD - |
| 3 | reserved |
| 4 | reserved |
| 5 | reserved |
| 6 | reserved |
| 7 | TxD + |
| 8 | TxD - |
| Power | |
| Pin 1 | Power 24V DC |
| Pin 2 | Power 0V |

Attributes

Applications:

Extension of systembus around 11.25 meter per LVDS buslink.
You need @C011 and @C010 together for one buslink.

Link Interface:

Highspeed LVDS bidirectional link with 1,25 GBaud.

Link Cable:

Specification: CAT5e
Shielding: S/FTP
Wire: Cu 0.51 mm (AWG24)
Type (LVDS): crossover
Length: max. 11.25m
Connectors: RJ45 Hirose TM21P
Recommended cable: TopNET 5000 CAT5e

Electrical Data

| | |
|-----------------------|--|
| Power supply external | 24V DC ± 20% |
| Operating Current | 50mA at 24V DC |
| | (only Controller, else depends from quantity of connected modules) |
| Input protection | 30V DC overvoltage, surge |
| Link interface | LVDS bidirectional |

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System Information

System IDno ID (only @C011 is visible in system bus)
 System address space.....need no space

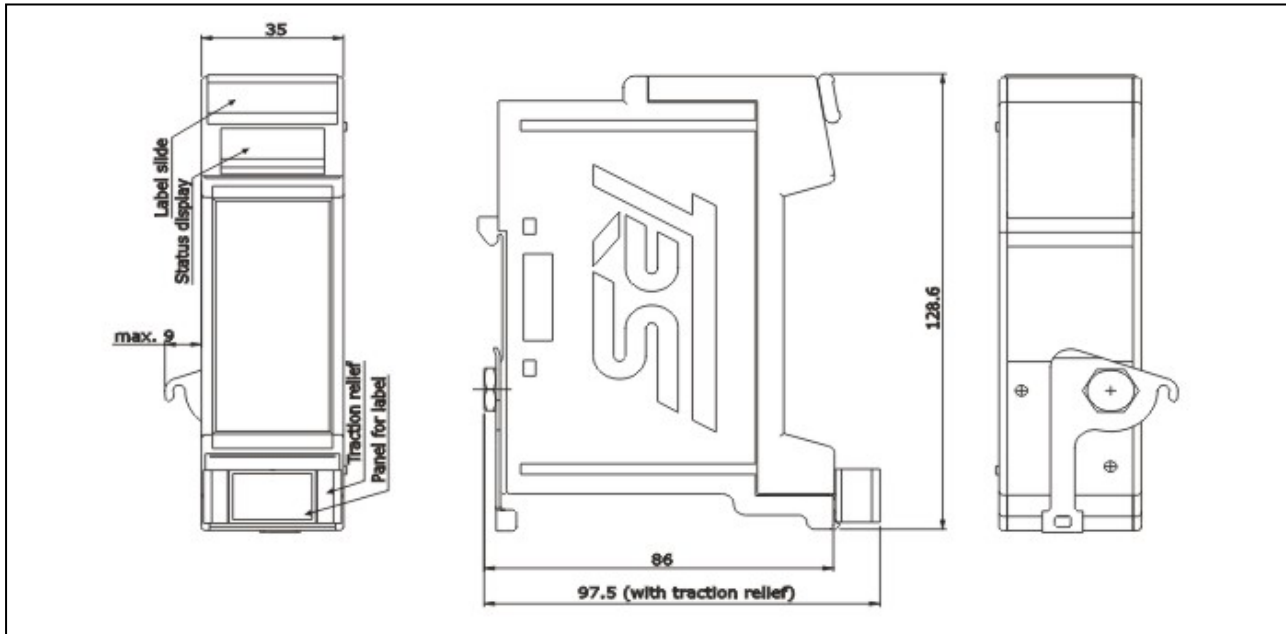
Environmental Conditions

Electromagnetic compatibility (EMC) EN 61000-4-2 (IEC-801-2) / EN 61000-4-4 (IEC-801-4)
 Operating temperature [°C] 0 .. +50
 Storage temperature [°C] -20 .. +70
 Humidity (rel)..... 98 % (non condensing)
 Protection class* IP 20 (DIN 40 050)
 *The protection class is valid only with housing and connector installed

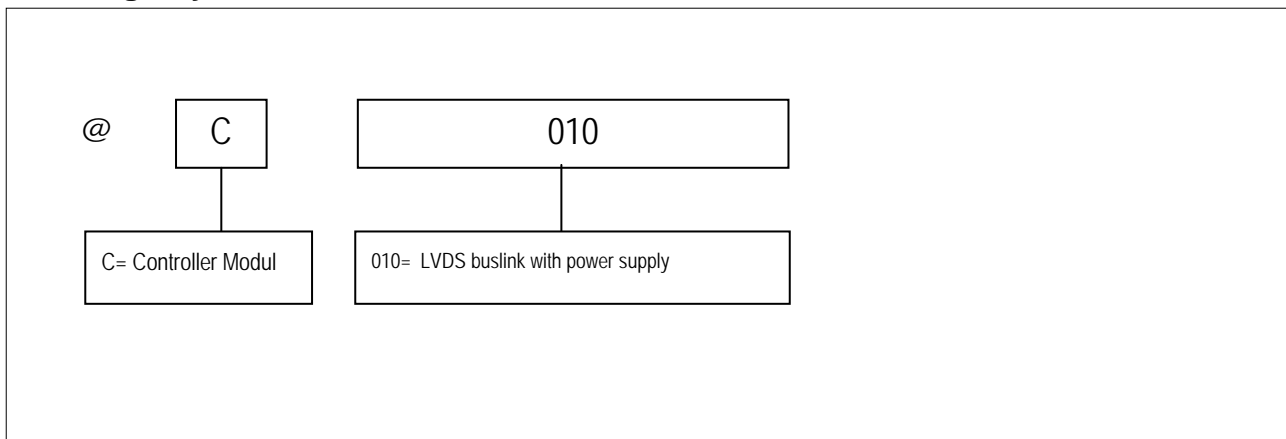
Mechanical Data PCB

Weight..... approx. 0.28kg including connector
 Dimension 102.5 x 73mm

Drawing (effective if mounted in @M housing)



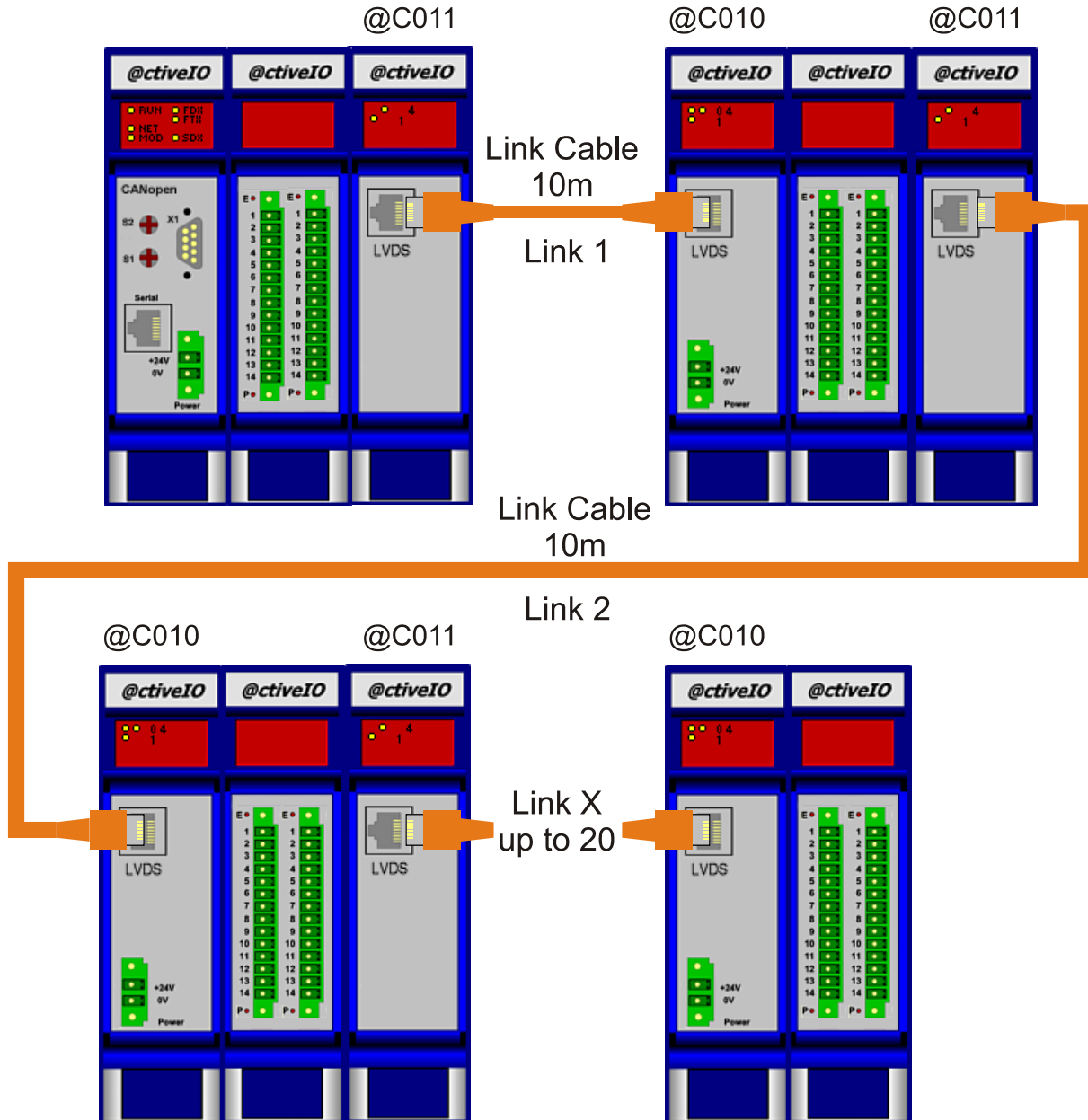
Ordering Key



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Example of Application

Connection and application of the sytembus extension



i Installation notes for the connection cable

- To ensure a failure-free functioning of the connection cable, note the following points:
- do not bend the cable (bending radius > 50mm) and do not put the cable under mechanical stress
 - do not install the cable near strong electrical (230/400V power line) and magnetical fields
 - all connection plugs must stuck firmly and be secured by a pull relief

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notes:

Description of the LEDs

| LED | Status | Description |
|-----|---------|---|
| 0 | 3,3V ON | Power supply and 24V DC connection are O.K. |
| 1 | SYNC ON | LVDS transmission chip start synchronisation, no valid data transmission possible |
| 4 | LOCK ON | LVDS link connection work properly |

Caution

In SYNC state the @C010 module generates a RESET on all modules behind them. So if lost LOCK, all outputs will be switched off.

History

| Version | Description | Date (m/y) |
|---------|--|------------|
| 01 | Added: Electrical data operating current | 11/03 |
| 02 | Added: Installation notes for connection cable | 12/06 |