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Demonstration board for the CLT3-4B current limited termination

Data Brief

Features

- For IEC61131-2 type 1 and 3 inputs
- 4 input channel topology
- Fully integrated internally fixed current limiter
- Optocoupler output drive
- Wide range supply voltage and temperature operation

Description

The CLT3-4B is a quadruple logic input termination for sensor or mechanical switch interfaces. It is designed to work in 24 VDC applications such as PLCs (programmable logic controllers), PACs (programmable automation controllers) and distributed I/O systems used in factory automation.

The device optimizes the input VI characteristic to reduce its power dissipation. This becomes critical when the application cabinet or housing requires higher protection levels such as IP65 and IP67. These closed cabinets are used in various automated lines including the food and chemical industry.

The power dissipated inside the module is very limited as there is usually no air circulation inside the box. The current limitation also reduces the power losses in the sensor.



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The most important aspect of the CLT3-4B is the electrical protection and susceptibility it brings to the application. The CLT3-4B implements efficient protection diodes on each input and supply voltage line. Serial resistors ensure a higher level of susceptibility of the entire input module.

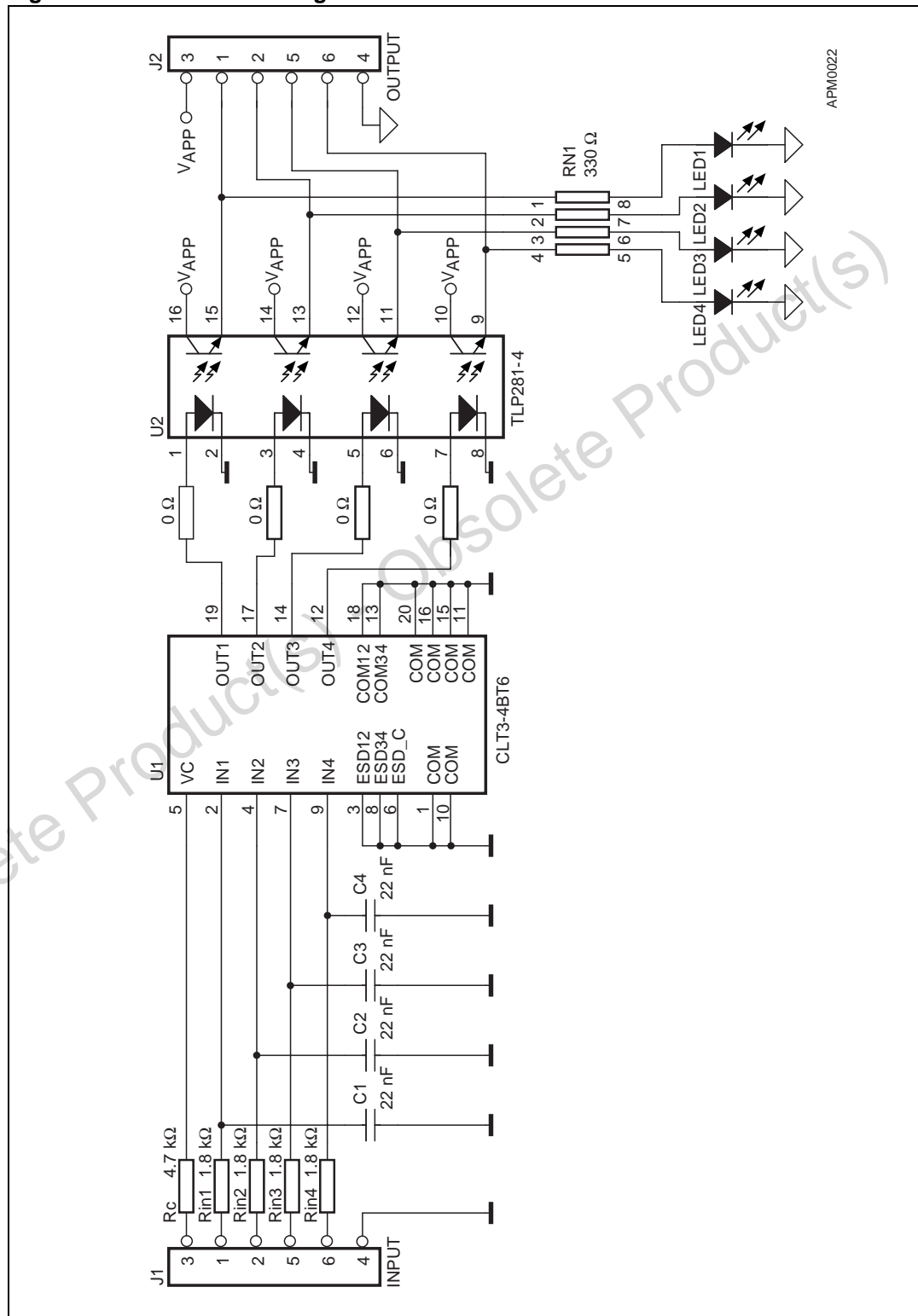
Thanks to its compact TSSOP20 package, the CLT3-4B device occupies very little space on the PCB compared to an equivalent discrete solution.

Block diagram

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1 Block diagram

Figure 1. Circuit block diagram



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
07-Jul-2008	1	Initial release.

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