



STEVAL-ISQ002V1

RS232 to PMBus bridge demonstration board based on the ST72264G1

Data brief

Features

- Based on the ST72264G1 microcontroller with multi-master I²C interface
- The microcontroller acts as PMBus master which communicates with any compatible PMBus slave using a 4-pin interface
- RoHS compliant

Description

This STEVAL-ISQ002V1 implements a PMBus™ (power management bus), an open standard protocol that defines a means of communicating with power conversion and other devices. The PMBus protocol has helped establish the first truly open communications standard for digital control of power systems. Implemented over the industry-standard SMBus (system management bus) serial interface, the PMBus protocol facilitates the programming, control and real-time monitoring of compliant power conversion products.

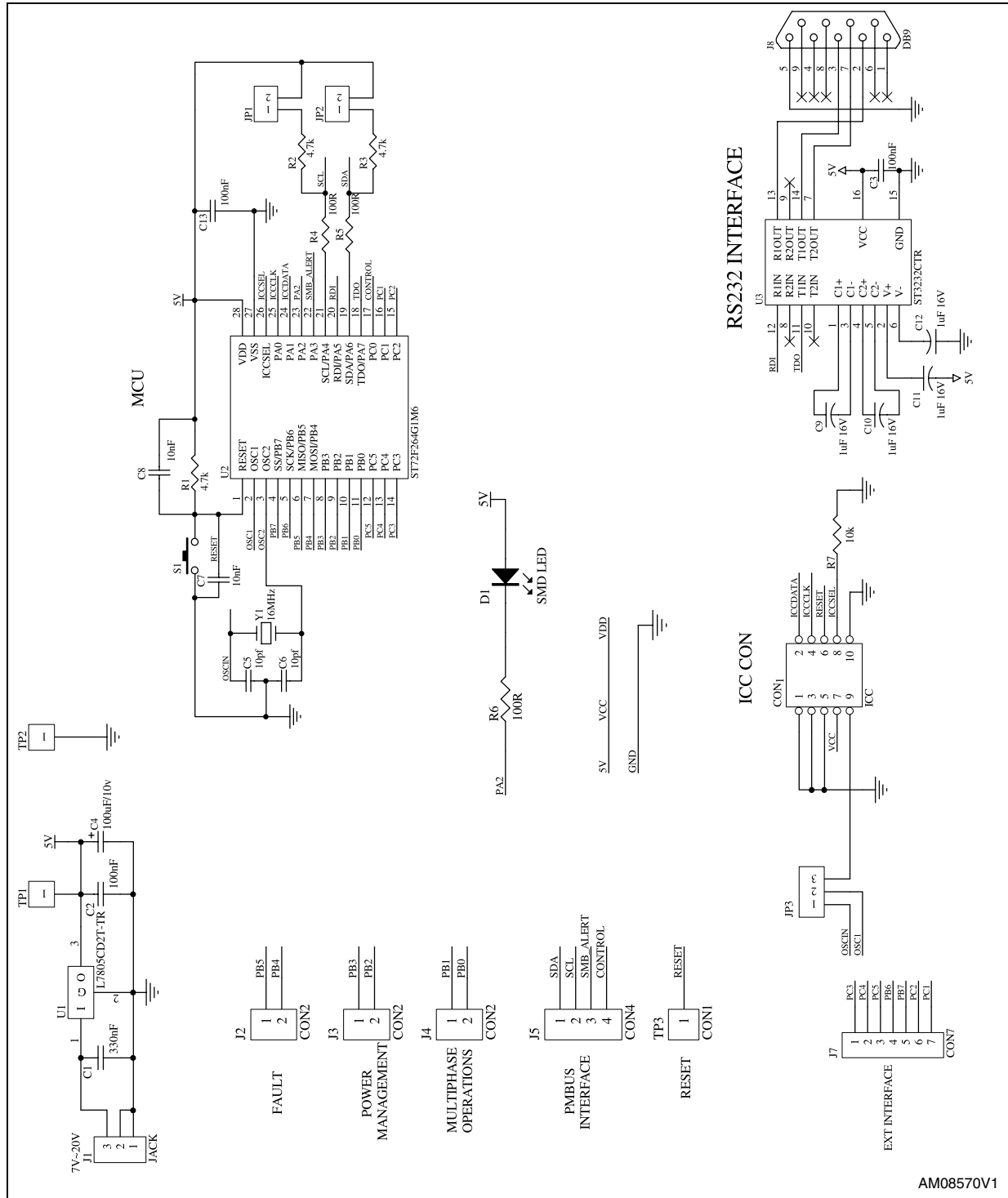
The demonstration is based on the ST72F264G1 microcontroller and communicates with the PC via Microsoft® HyperTerminal. The microcontroller employs a multi-master I²C peripheral for PMBus communication. The firmware of the application performs the PMBus bus protocols described in the PMBus power system management protocol specification V 1.0.

The purpose of the STEVAL-ISQ002V1 is to demonstrate the capabilities of the PMBus feature using the ST7 I²C peripheral to support standard PMBus commands.



1 Circuit schematic

Figure 1. STEVAL-ISQ002V1 schematic diagram



AM08570V1

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
25-Feb-2011	1	Initial release.

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