intersema

AN505

Printer Port module schematics

1 Introduction

This document provides the electrical schematics of the printer port module used with the MS5534 and MS5535.

2 Schematic

The MS5534 (or MS5535) must be powered with a voltage, VDD, in the range of 2.4 to 3.6V. Unfortunately, there is no real power output at the parallel port connector. So we generate the appropriate supply voltage by creating a simple regulator (using a Zener diode) feed by some digital outputs of the parallel port, set to the logical state "1".

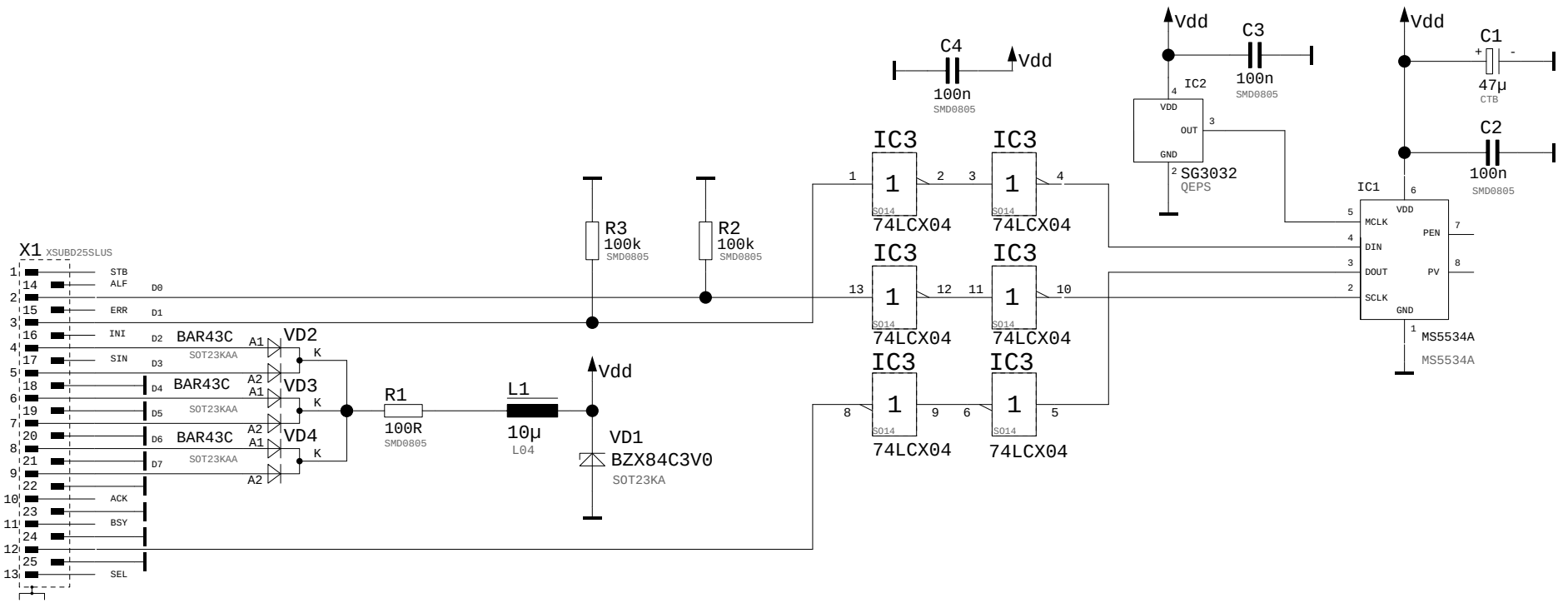
The DIN and SCLK signals are driven by a 74LCX04 IC with 5V compliant inputs working at VDD. The external pull-down resistors on the digital outputs lines (DIN and SCLK), are used to bias the inputs of the 74LCX04 if the parallel port is set to three-state mode.

The DOUT is also driven by the 74LCX04 IC to the "Paper-out" input of the parallel port. DOUT will not go higher than VDD. So we are using the fact that the threshold between logic 1 and logic 0 is near 2.5V to be sure that the 3V DOUT signal is interpreted as a digital 1 by the computer.

The MCLK signal is generated by a SG-3032JC oscillator from Epson electronics. Technical information can be found on EPSON's web site:

www.epson-electronics.de for Europe and
www.eea.epson.com for the United States (search for "SG-3032")

Please also note that there is the 47μF condensator near the MS5534 device.



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Rev 3

Bl.

REVISION HISTORY

Date	Revision	Type of changes
March 18, 2003	V1.1	Initial release

FACTORY CONTACTS

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