

AutoID Module Circuit Overview

The AutoID circuit is implemented on a four-layer surface mount printed circuit board (PCB 044 issue1).

One of the layers is used for +5V, and one as a ground plane. The other two are used for signals.

The circuit consists essentially of a RFID base station IC, an integral PCB antenna coil, an AVR microcontroller, and a RS232 driver. See fig 1.

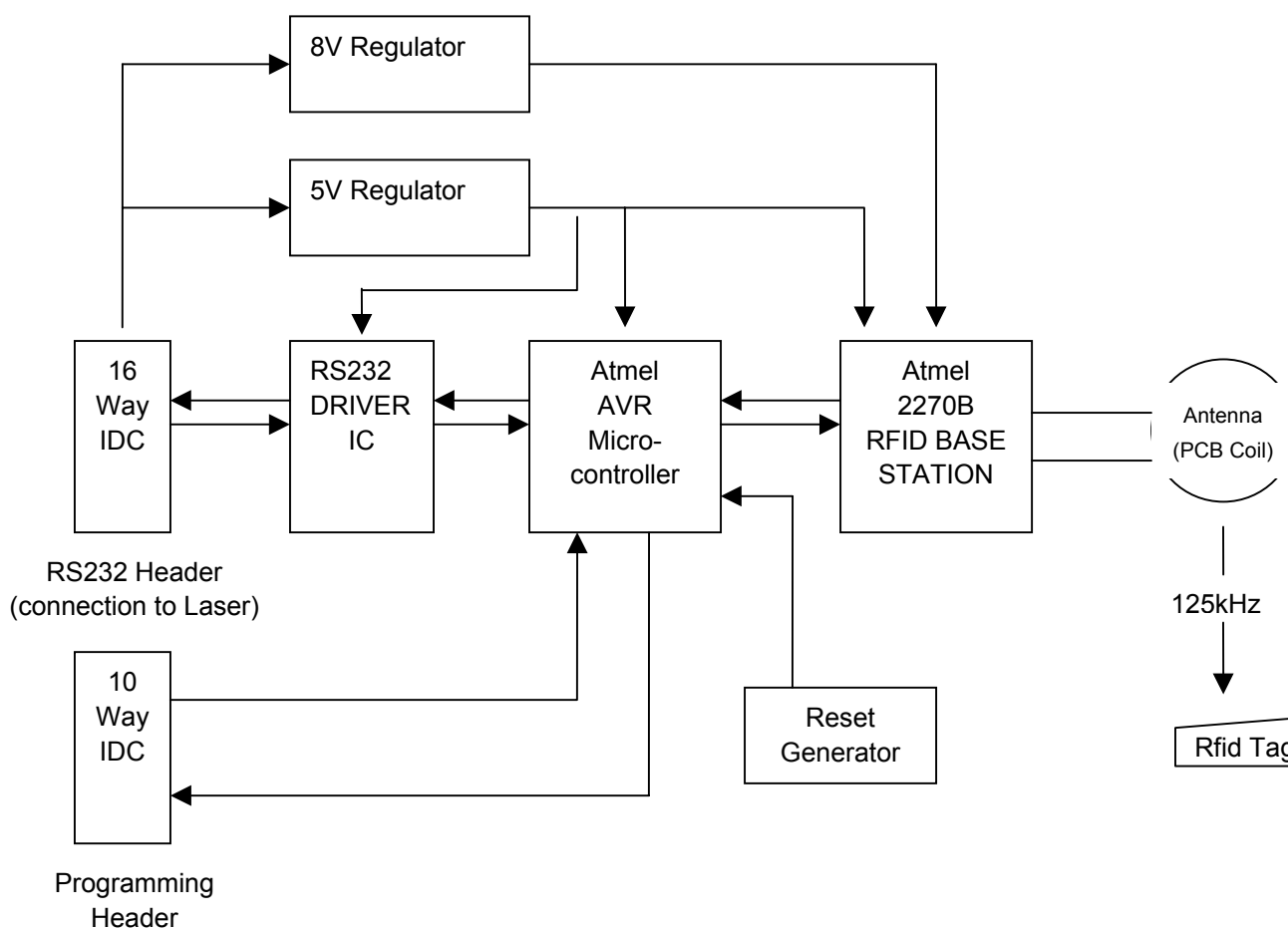


Fig. 1 AutoID Block Diagram

Connection to D15plus / D30plus Lasers

The AutoID module is connected to the Laser via an RS232 port. This connection is made via an IDC connector/ribbon cable assembly.

A MAX232A converts the RS232 signals to 5V logic levels for the AVR micro-controller (ATmega 8515L).

16 way IDC connection details.

Pin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Function	n/c	n/c	n/c	n/c	0V	n/c	+12V	n/c	0V	n/c	0V	CTS	RxD	RTS	TxD	0V

Notes: 1. n/c = no connection.

2. RTS and CTS are linked on the AutoID module.