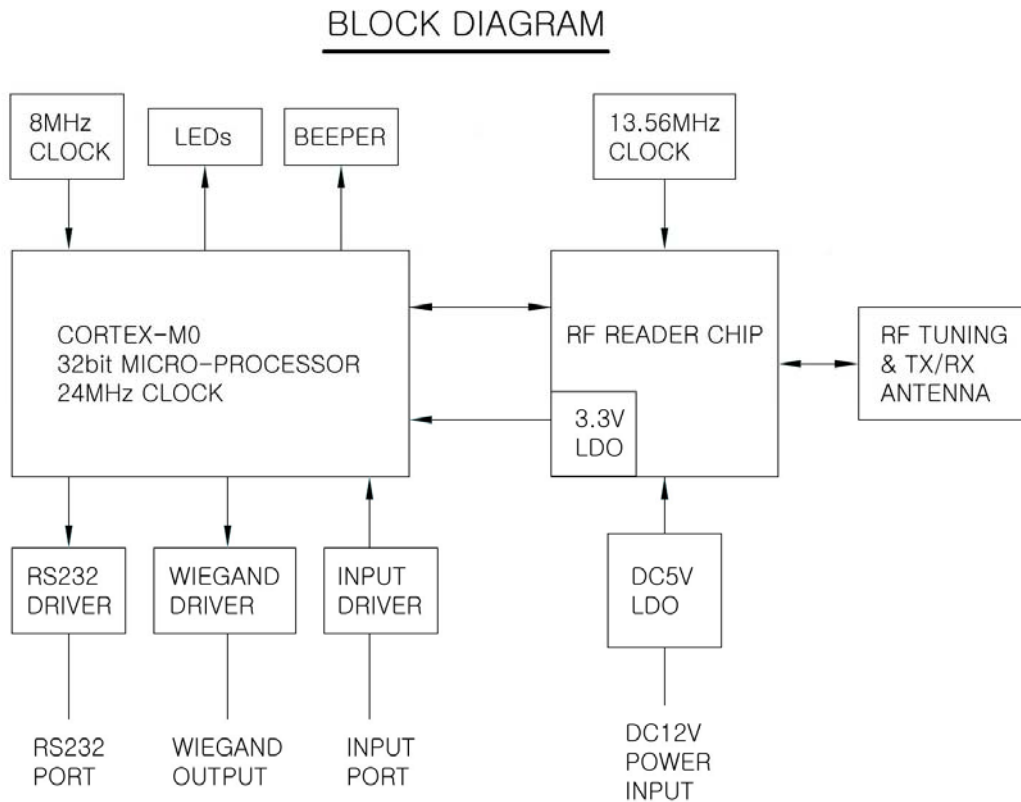


BSR10 Smart Card Reader

1. BSR10 Reader Block Diagram



2. BSR10 Reader Operating Theory

- a. DC12V power supplies to DC5V LDO voltage regulator and DC5V supplies power to RF Reader chip which contains internal 3.3V LDO to supply power to 32bit Micro-Processor chip. The 32bit MCU is running at 24MHz clock speed and RF Reader chip is running at 13.56MHz clock to read smart cards.
- b. When DC12V power applied to reader, MCU makes flashing of 4 Red color LEDs and Green color LEDs with 3 beep sounds to confirm initialization is successfully done and all relevant setup is done. RF Reader chip generates 13.56MHz RF with REQUEST command to Antenna circuitry to detect smart cards.
- c. When a valid CSN(Card Serial Number) is read, MCU send 34bit Wiegand Data and RS232 Data to its Output port and 4 Green LEDs will flash with a Beep sound.
- d. When LED Control Input puts to Ground, MCU turns 4 Green LEDs ON.
- e. When BEEP Control Input puts to Ground, MCU makes continuous beep sound.

Product Type	RFID
Operation Frequency:	13.56MHz
Modulation Type:	AM
Number Of Channel	1CH.
Antenna Designation:	Printed PCB antenna
Antenna Gain(Peak)	0.5 dBi
Output Power:	59.9dBuV/m (PK Max.)