2270 HIWAY 54
IOLA, KS 66749

OWNERS MANUAL FOR AYB067 CIRCUIT:

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INFORMATION TO USER:

IF CHANGES OR MODIFICATIONS ARE DONE TO AYB067 CIRCUIT BOARD WITH OUT EXPRESSLY APPROVED BY THE PARTY RESONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

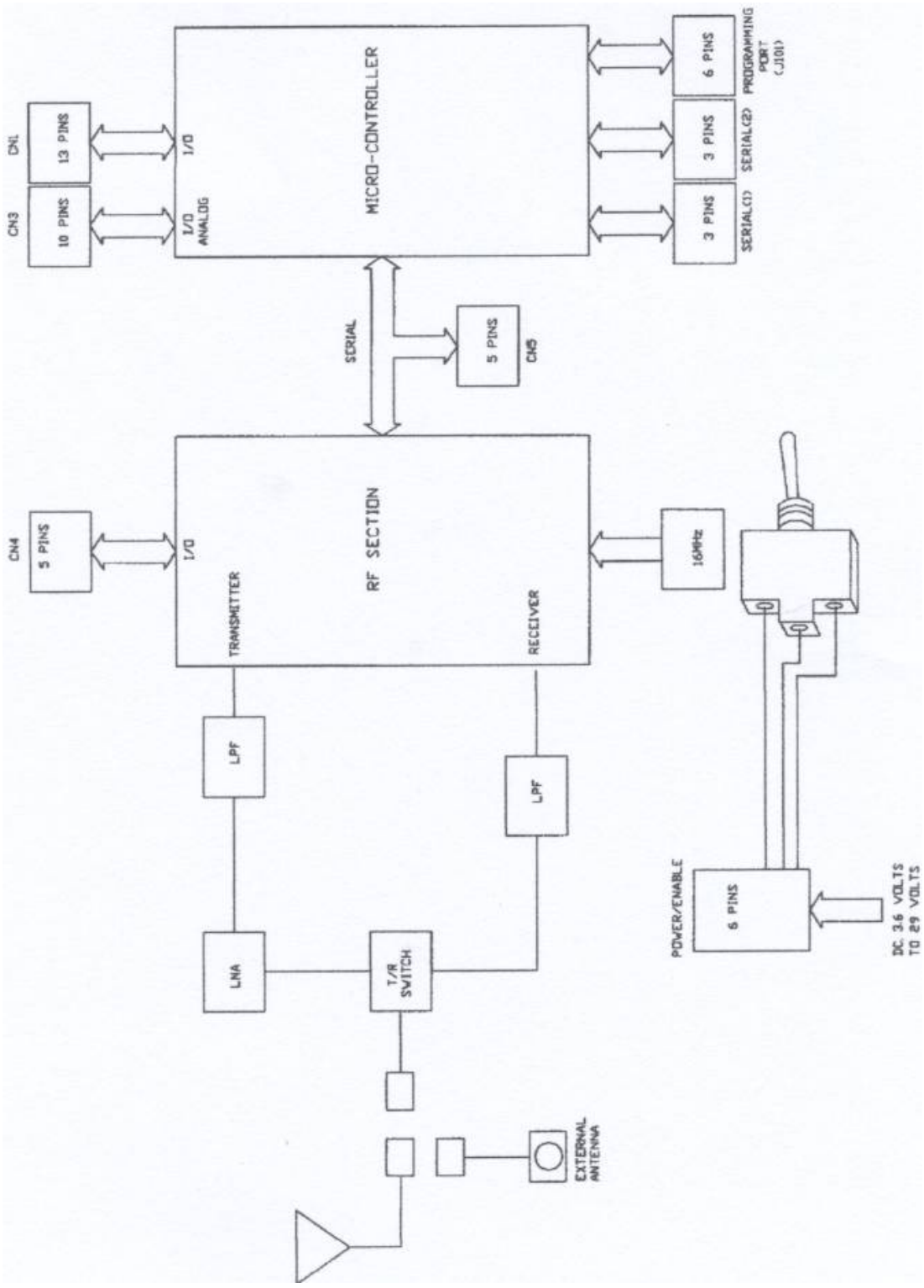
NOTE:THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS B DIGITAL DEVICE,PURSUANT TO PART 15 OF THE FCC RULES.THESE LIMITS ARE DESIGN TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERANCE IN A RESIDENTIAL INSTALLATION.THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS,MAY CAUSE HARMFUL INTERFERANCE TO RADIO COMMUNICATIONS.HOWEVER, THERE IS NO GUARANTEE THAT INTERFERANCE WILL NOT OCCUR IN A PATICULAR INSTALLATION.IF THIS EQUIPMENT DOES CAUSE HARMFUL INTERFERANCE TO RADIO OR TELEVISION RECEPTION, WHICH CAN BE DETERMINED BY TURNING THE EQUIPMENT OFF AND ON, THE USER IS ENCOURAGED TO TRY TO CORRECT THE INTERFERANCE BY ONE OR MORE OF THE FOLLOWING MEASURES.

- REORIENT OR RELOCATE THE RECEIVING ANTENNA.

- INCREASE THE SEPARATION BETWEEN THE EQUIPMENT AND RECEIVER.
- CONNECT THE EQUIPMENT INTO AN OUTLET ON A CIRCUIT DIFFERENT FROM THAT TO WHICH THE RECEIVER IS CONNECTED.

CONSULT THE DEALER OR AN EXPERIENED RADIO/TV TECHNICIAN FOR HELP.

BLOCK DIAGRAM:



GENERAL PUPOSE HEADER:

SERIAL 1:

HDR. PIN	MCU PORT/PIN	FUNCTION	REMARKS
1	GND	GENERAL PURPOSE DIGITAL I/O	3.3 VOLT LOGIC UART
2	PTE O/Tx D1		
3	PTE 1/Rx D1		

SERIAL 2:

HDR. PIN	MCU PORT/PIN	FUNCTION	REMARKS
1	GND	GENERAL PURPOSE DIGITAL I/O	3.3 VOLT LOGIC UART
2	PTC 0/Tx D2		
3	PTC 1/Rx D2		

CN 1:

HDR. PIN	MCU PORT/PIN	FUNCTION	REMARKS
8	PTA 0	GENERAL PURPOSE DIGITAL I/O	CAN WAKE MCU FROM STOP 3 OR WAIT MODE. CAN DETECT FALLING/RISING EDGES WHEN KEYBOARD INTERRUPT IS ENABLING.
7	PTA 1		
6	PTA 2		
5	PTA 3		
4	PTA 4		
3	PTA 5		
2	PTA 6		
1	PTA 7		
A	PTD 0		
B	PTD 1		
C	PTD 2		
D	PTD 3		
E	PTD 4		

CN 3:

HDR. PIN	MCU PORT/PIN	FUNCTION	REMARKS
1	VCC/3.3 VOLT	ANALOG INPUT OR GENERAL PUPOSE DIGITAL I/O	CONNECTED TO MCU ANALOG TO DIGITAL 10 BIT A/D CONVERTER, CHANNELS 0-7.
2	PTB 7		
3	PTB 6		
4	PTB 5		
5	PTB 4		
6	PTB 3		
7	PTB 2		
8	PTB 1		
9	PTB 0		
10	GND		

CN 4:

HDR. PIN	MCU PORT/PIN	FUNCTION	REMARKS
1	GPIO 7	GENERAL PURPOSE DIGITALI/O ON RF.	COMMUNICATES TO MCU THRU SPI PORT.
2	GPIO 6		
3	GPIO 5		
4	GPIO 3		
5	GND		

CN 5:

HDR. PIN	MCU PORT/PIN	FUNCTION	REMARKS
1	GND		USED FOR RF AND THE PROCESSOR TO SERIAL COMMUNICATION.
2	PTE 2	SLAVE SELECT SPI	
3	PTE 3	MISO SPI	
4	PTE 4	MOIS SPI	
5	PTE 5	SPSCK SPI	

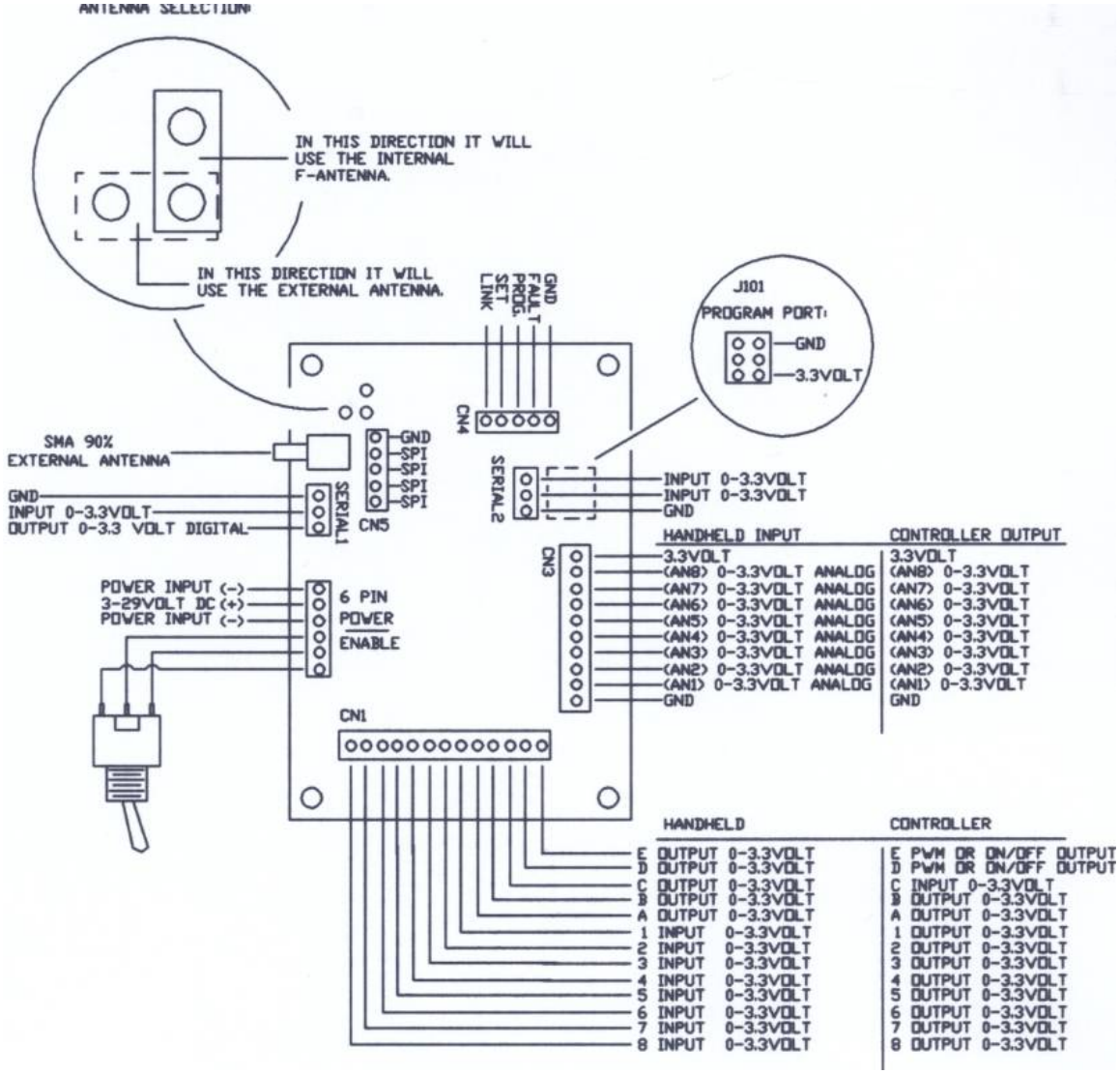
6PIN:

HDR. PIN	MCU PORT/PIN	FUNCTION	REMARKS
1		GND	POWER GROUND
2		POWER	3.5v TO 29v
3		GND	POWER GROUND
4		GND	BOARD GROUND
5		ENABLE	ALLOWS UNIT TO POWER UP WHEN ON
6	PTA 7,PTA 6 PTA 5,PTA 4	EN-3	COMMUNICATES TO PROCESSOR THAT POWER SWITCH IS OFF.

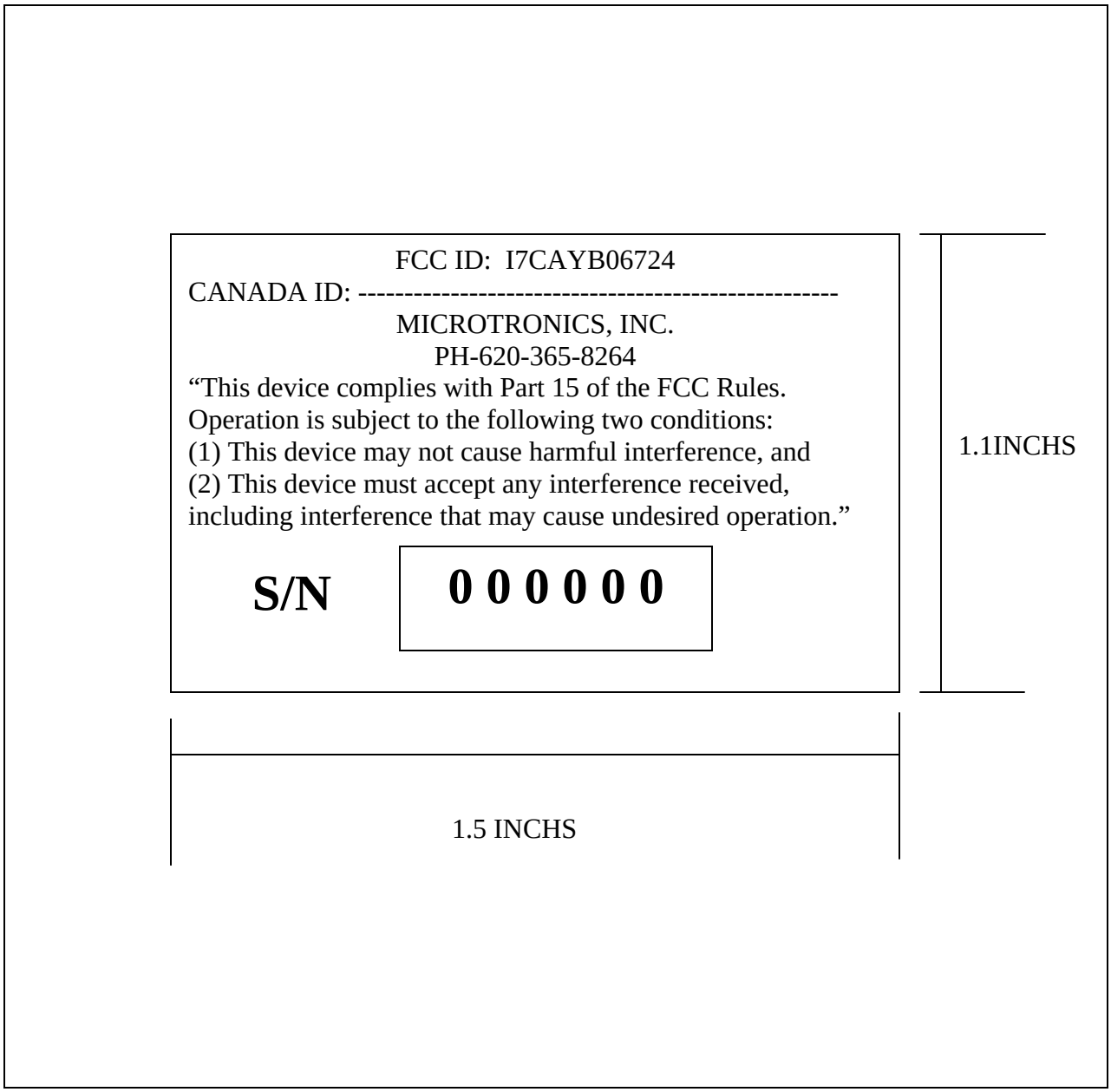
J101 PROGRAMMING HEADER :

HDR. PIN	MCU PORT/PIN	FUNCTION	REMARKS
1	PTG 0/BK GO	SERIAL PROGRAMMING GENERAL PUPOSE I/O	ACTIVE LOW RESET.
2	GND	GROUND	
3	NC	NC	
4	RESET	RESET TO MCU	
5	NC	NC	
6	VCC	PROVIDES POWER	

CONNECTOR DRAWING:



FCC I.D. LABLE


FCC ID: I7CAYB06724
CANADA ID: ----------
MICROTRONICS, INC.
PH-620-365-8264
"This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received,
including interference that may cause undesired operation."
S/N
0 0 0 0 0 0
1.1INCHS
1.5 INCHS