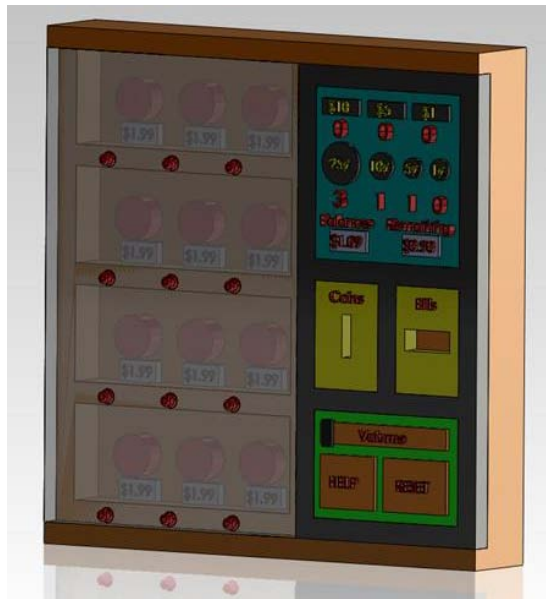


INTERACTIVE VENDING MACHINE

CURRENCY ACCEPTOR SPECIFICATIONS



TEAM NORTH SHORE – GROUP 11

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16.499

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OPERATIONAL DETAILS

Introduction

The currency acceptor on the Interactive Vending Machine was designed to be a modular component in the system. The front face of the currency acceptor module is removable with space dedicated behind it for mechanical components.

Electrical Operation

The interactive Vending Machine system operates as a complete system with multiple slave microcontrollers controlled on a serial bus by a single master microcontroller. To ease the integration into the system a microcontroller has already been dedicated to the function of reading a currency input. This is done by applying a TTL high pulse signal to designated pins (Table 1) on a PIC18F4550. The pulse should not exceed a pulse width of 25ms.

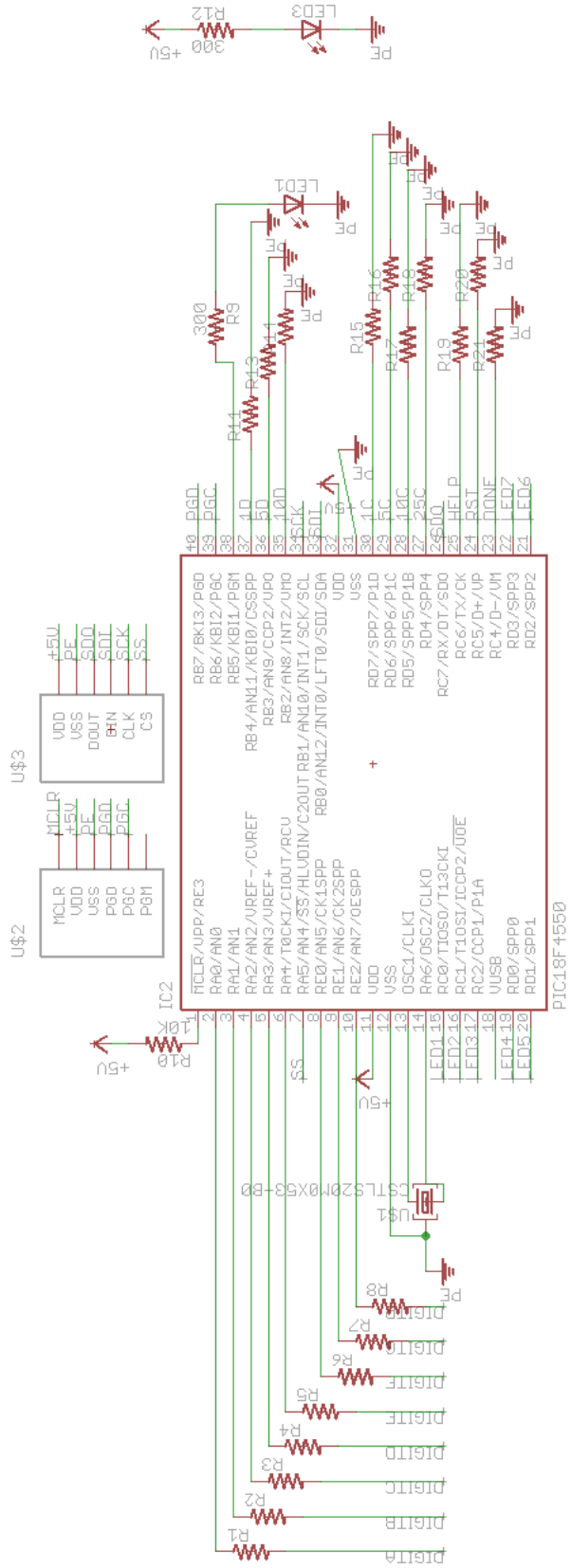
Table 1. Currency Pin Input

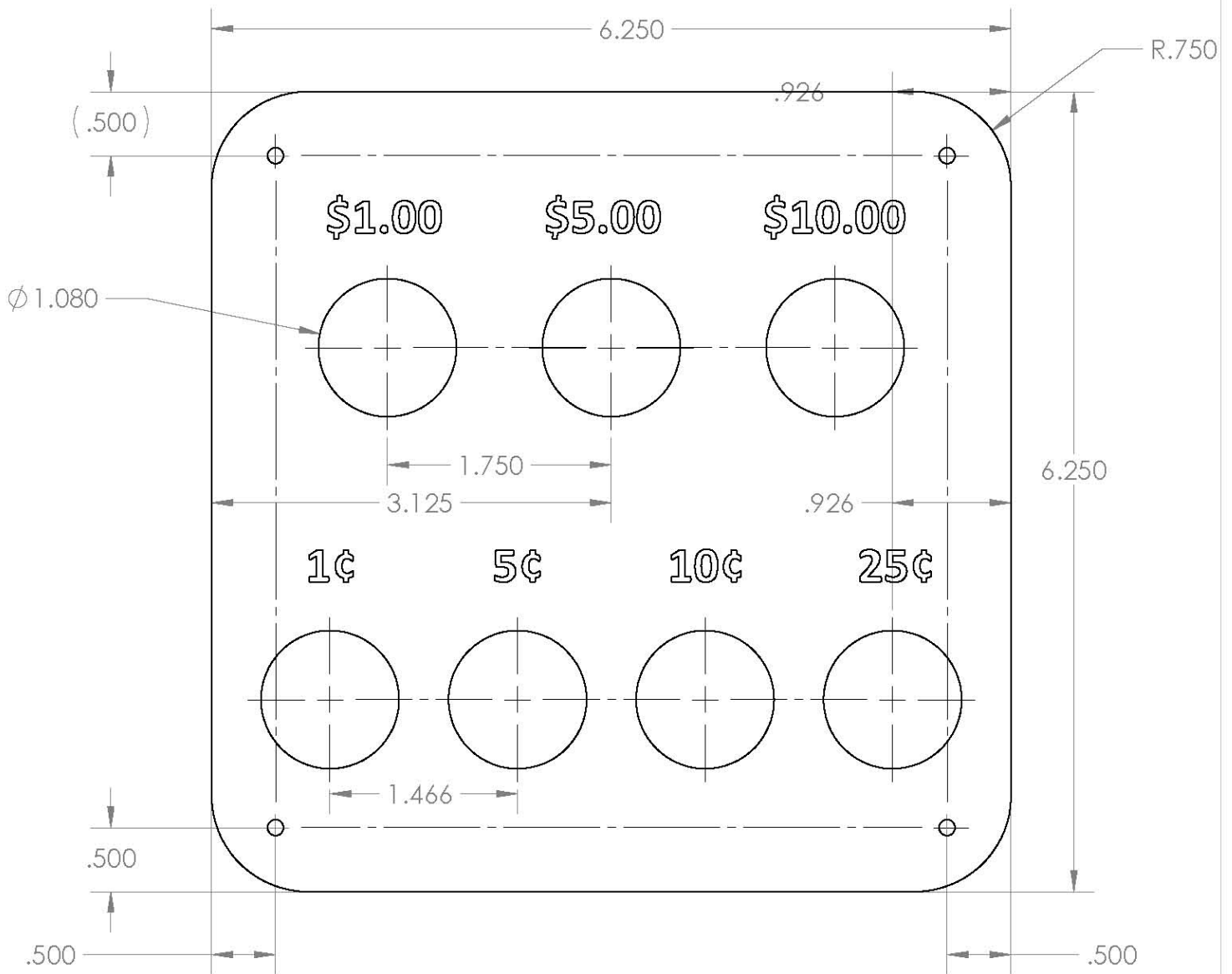
Input Port	Signal Type	Pin # (PIC18F4550)	Function
PORTDbits.RD7	TTL	30	One Cent
PORTDbits.RD6	TTL	29	Five Cents
PORTDbits.RD5	TTL	28	Ten Cents
PORTDbits.RD4	TTL	27	Twenty-Five Cents
PORTBbits.RB4	TTL	37	One Dollar
PORTBbits.RB3	TTL	36	Five Dollars
PORTBbits.RB2	TTL	35	Ten Dollars

Mechanical Specifications

Inside the Interactive vending machine there is a depth of 10 inches available to use for a currency acceptor module. It is recommended that the currency inset be placed as closely to the left side of the module to ensure horizontal clearance from the sidewall and circuitry.

Schematic





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		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	
		MATERIAL 1/8" Acrylic	
		FINISH NONE	
NEXT ASSY	USED ON	APPLICATION DO NOT SCALE DRAWING	

	NAME	DATE
DRAWN	NJC	4/24/2012
CHECKED	AJR	4/25/2012
ENG APPR.	NJC	4/25/2012
MFG APPR.		
Q.A.		
COMMENTS:		

Team North Shore

Currency Acceptor

SIZE A	DWG. NO. currency insert	REV.
SCALE: 1:2	WEIGHT:	SHEET 1 OF 1