FRONT PANEL SWITCH INPUT

FRONT PANEL LED OUTPUT

TTL SERIAL TO
USB CONNECTOR

J1
FPANEL

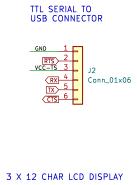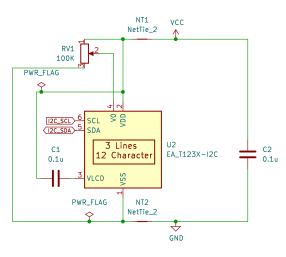|				
GND	1	2	GND	
VCC	3	4	VCC	
LED0	5	6	FP-D0	
LED1	7	8	FP-D1	
LED2	9	10	FP-D2	
LED3	11	12	FP-D3	
LED4	13	14	FP-D4	
LED5	15	16	FP-D5	
LED6	17	18	FP-D6	
LED7	19	20	FP-D7	
I2C_SDA	21	22	GND	
I2C_SCL	23	24	EXT_RES	
GND	25	26	IM2-EN	
RTS	27	28	IM2-EN-OE	
VCC-TS	29	30	INT0-EN	
RX	31	32	INT0	
TX	33	34	WAIT-EN	
CTS	35	36	WAIT	
VCC	37	38	VCC	
GND	39	40	GND	

J11 NOTE:

PINS 5, 7, 9, 11, 13, 15, 17, 19 ARE FOR LED STATUS
FOR ROMWBW FRONT PANEL INDICATOR

PINS 6, 8, 10, 12, 14, 16, 18, 20 ARE FOR SWITCH
INPUTS FOR ROMWBW FRONT PANEL

PINS 21, 23 ARE FOR I2C CONNECTION (SDA & SCL)

PINS 25, 27, 29, 31, 33, AND 35
ARE FOR TTL SERIAL CONNECTOR TO UART

PINS 29, 37 ARE FOR SERIAL VCC POWER ENABLE

PINS 22, 24 ARE FOR EXTERNAL RESET SWITCH

PINS 26, 28 ARE FOR IM2 CIRCUIT ENABLE

PINS 30, 32 ARE FOR INTERRUPT 0 ENABLE

PINS 34, 36 ARE FOR WAIT STATE CIRCUIT ENABLE

U1
74LS240

LED0	2	I0a	O0a	18
LED1	4	I1a	O1a	16
LED2	6	I2a	O2a	14
LED3	8	I3a	O3a	12
LED4	11	I0b	O0b	9
LED5	13	I1b	O1b	7
LED6	15	I2b	O2b	5
LED7	17	I3b	O3b	3

VCC 20
GND 10
OEa 1
OEb 19

D1 LED
D2 LED
D3 LED
D4 LED
D6 LED
D7 LED
D8 LED
D9 LED

RN1
R_Network08
VCC

SW9
SW_Push

FP-D0   GND
SW1 SW_SPDT

FP-D1   GND
SW2 SW_SPDT

FP-D2   GND
SW3 SW_SPDT

FP-D3   GND
SW4 SW_SPDT

FP-D4   GND
SW5 SW_SPDT

FP-D5   GND
SW6 SW_SPDT

FP-D6   GND
SW7 SW_SPDT

FP-D7   GND
SW8 SW_SPDT

EXT_RES   GND

IM2-EN   IM2-EN-OE
SW10 SW_SPDT

INT0-EN   INT0
SW11 SW_SPDT

WAIT-EN   WAIT
SW12 SW_SPDT

VCC   VCC-TS
SW13 SW_SPDT

NOTE: USE SS12D07
SPDT SWITCHES

J2
Conn_01x06

GND	1	
RTS	2	
VCC-TS	3	
RX	4	
TX	5	
CTS	6	

3 X 12 CHAR LCD DISPLAY

NT1
NetTie_2
VCC

RV1
100K

PWR_FLAG

I2C_SCL
I2C_SDA

C1
0.1u

U2
EA_T123X-I2C
3 Lines
12 Character

SCL
SDA
VO
VDD
VLCD
VSS

C2
0.1u

PWR_FLAG

NT2
NetTie_2

GND

U3
LP2950-3.3_TO92
PWR_FLAG

VCC
VI VO
GND

C3 10u
C4 10u

10K R1
10K R2

C5 0.1u

VDD1

U4
ATtiny1614-SS

VCC 1

PB0 9
PB1 8
PB2 7
PB3 6

RESET/PA0 10
PA1 11 DI
PA2 12 DO
PA3 13 CLK
PA4 2   CS
PA5 3
PA6 4
PA7 5

GND 14

I2C_SCL
Q1
Q_NMOS_SGD

I2C_SDA
Q2
Q_NMOS_SGD

220 R3
D10
LED_Dual_Bidirectional

GND

NOTE: USE TN0702 NMOS
FET SOURCE/DRAIN/GATE

J3
Conn_01x08

VCC	1	
VDD1	2	
GND	3	
CLK	4	
DO	5	
DI	6	
CS	7	
	8	

NOTE: ADAFRUIT
MICRO SD CARD
BREAKOUT BOARD

VCC PWR_FLAG

470 R6

D5 LED

PWR_FLAG

GND

H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole

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