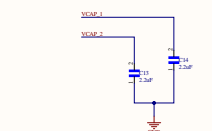
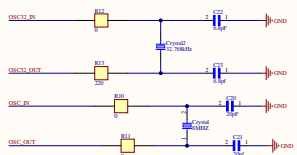


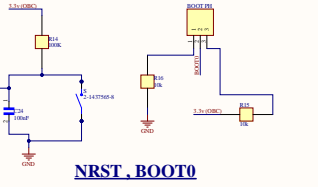
LEDS



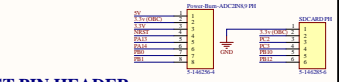
VCAPS



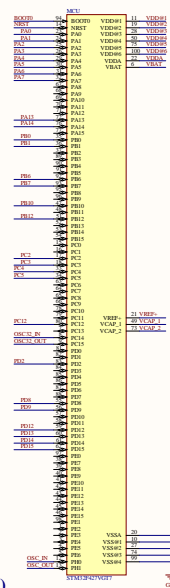
CRYSTALS



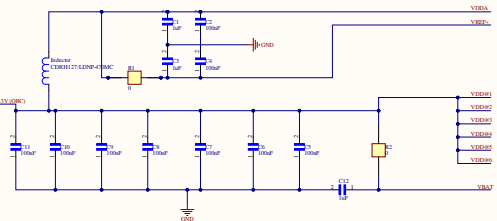
NRST, BOOT0



TEST PIN HEADER



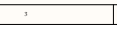
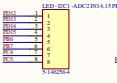
STM32F427VGT7 (OBC)



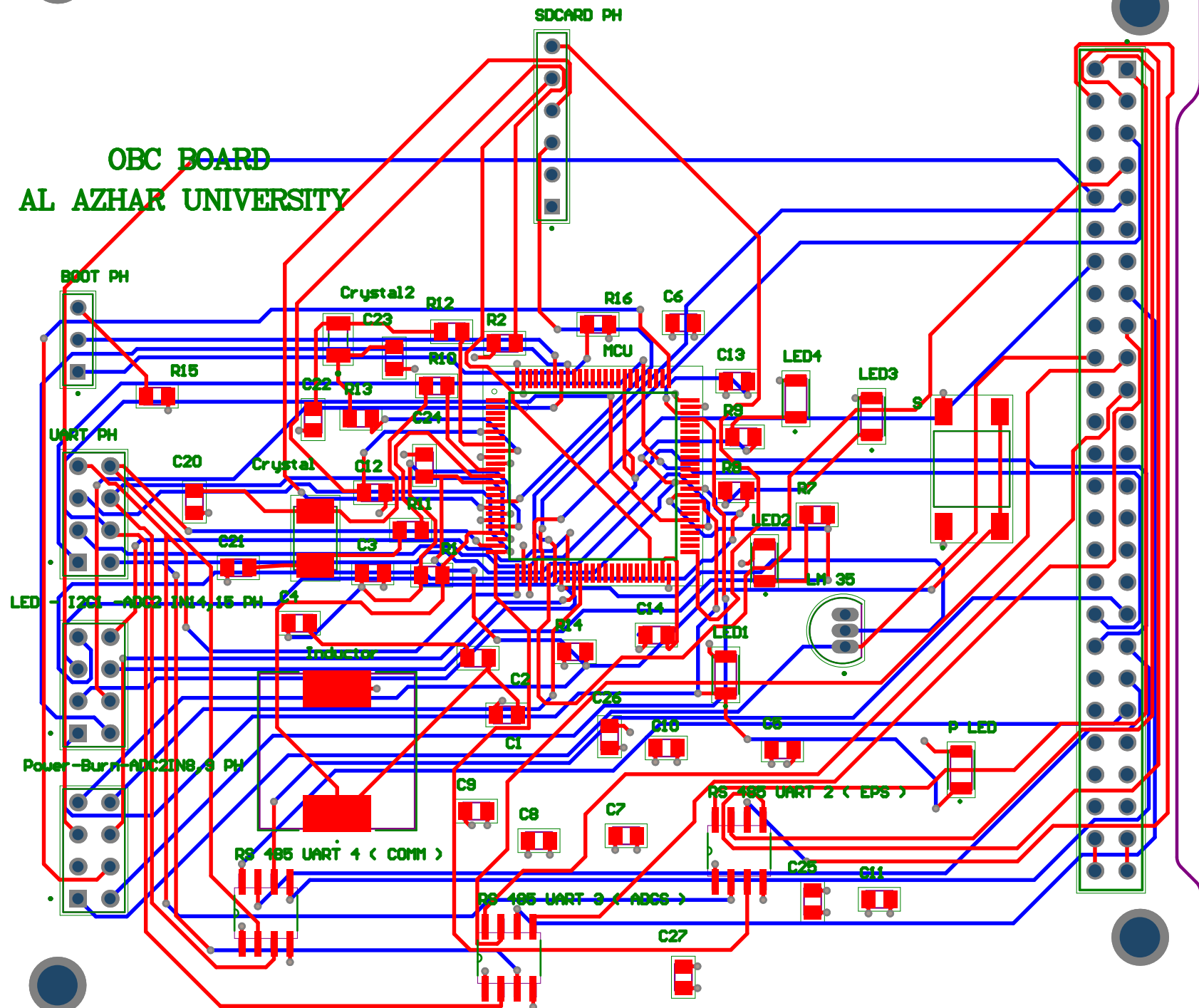
POWER



SENSORS



OBC BOARD
AL AZHAR UNIVERSITY



Comment	Description	Designator	Footprint	LibRef	Quantity
4-103327-5	Conn Unshrouded Header HDR 3 POS 2.54mm Solder ST Thru-Hole Carton	BOOT PH	TE_4-103327-5	4-103327-5	1
1uF	CAP CER 10000PF 50V 0805	C1, C3, C12	CAPC2012X95N	UMK212SD103KD-T	3
100nF	CAP CER 10000PF 50V 0805	C2, C4, C5, C6, C7, C8, C9, C10, C11, C24, C25, C26, C27	CAPC2012X95N	UMK212SD103KD-T	13
2.2uF	CAP CER 10000PF 50V 0805	C13, C14	CAPC2012X95N	UMK212SD103KD-T	2
20pF	CAP CER 10000PF 50V 0805	C20, C21	CAPC2012X95N	UMK212SD103KD-T	2
6.8pF	CAP CER 10000PF 50V 0805	C22, C23	CAPC2012X95N	UMK212SD103KD-T	2
8MHZ	8MHz \pm 20ppm Crystal 18pF 140 Ohms 2-SMD, No Lead	Crystal	XTAL500X320X130N	ABM3-8.000MHZ-D2Y-T	1
32.768kHz	32.768kHz \pm 20ppm Crystal 12.5pF 70 kOhms 2-SMD, No Lead	Crystal2	XTAL_ECS-.327-12.5-34S-TR	ECS-.327-12.5-34S-TR	1
CDRH127/LDNP-470MC	47 μ H Shielded Inductor 3.25A 78mOhm Max Nonstandard	Inductor	IND_CDRH127/LDNP-470MC_SUM	CDRH127/LDNP-470MC	1
ESQ-126-39-G-D	52 Position Elevated Socket Connector Through Hole	J	SAMTEC_ESQ-126-39-G-D	ESQ-126-39-G-D	1
BLUE-LED	LED Blue 470nm LED Indication 3.3V	LED1, P LED	RESC3015X65	LTST-C150TBKT	2
RED-LED	LED Blue 470nm LED Indication 3.3V	LED2	RESC3015X65	LTST-C150TBKT	1
GREEN-LED	LED Blue 470nm LED Indication 3.3V	LED3	RESC3015X65	LTST-C150TBKT	1
ORANGE-LED	LED Blue 470nm LED Indication 3.3V	LED4	RESC3015X65	LTST-C150TBKT	1
5-146256-4	08 MODII HDR DRST B/A .100CL LF	LED - I2C1 -ADC2 IN14,15 PH, Power-Burn-ADC2IN8,9 PH, UART PH	TE_5-146256-4	5-146256-4	3
LM35DZ/NOPB	Temperature Sensor Analog, Local 0 $^{\circ}$ C ~ 100 $^{\circ}$ C 10mV/ $^{\circ}$ C TO-92-3	LM 35	TO92127P521H735-3	LM35DZ/NOPB	1
MAX471?	MAX471 Voltage And Current Sensor Module Consume Voltage Load Detection Module	MAX471	PCBComponent_1	MAX471?	1
STM32F427VGT7	ARMA [®] Cortex [®] A [®] -M4 STM32F4 Microcontroller IC 32-Bit 180MHz 1MB _1M x 8_FLASH 100-LQFP_14x14_	MCU	QFP50P1600X1600X160-100N	STM32F427VGT7	1
0		R1, R2, R10, R11, R12	CAPC2012X95N	RESISTOR	5
130		R7, R9	CAPC2012X95N	RESISTOR	2
80		R8	CAPC2012X95N	RESISTOR	1
220		R13	CAPC2012X95N	RESISTOR	1
100K		R14	CAPC2012X95N	RESISTOR	1
10k		R15, R16	CAPC2012X95N	RESISTOR	2
120		R25, R26, R27, R28, R29, R30	CAPC2012X95N	RESISTOR	6
330		R31	CAPC2012X95N	RESISTOR	1
MAX488ESA+	1/1 Transceiver Full RS422, RS485 8-SOIC	RS 485 UART 2 (EPS), RS 485 UART 3 (ADCS), RS 485 UART 4 (COMM)	SOIC127P600X175-8N	MAX488ESA+	3
2-1437565-8	Tactile Switch SPST-NO Top Actuated Surface Mount	S	SW_2-1437565-8	2-1437565-8	1
5-146285-6	Connector Header Through Hole 6 position 0.100 (2.54mm)	SDCARD PH	TE_5-146285-6	5-146285-6	1