Bill of Material for UBC Capstone 46
On 09/03/2015 at 6:54:22 PM

Designator	MPN	Manufacturer	Quantity	Comment	Pattern
R1, R5	-	any 10K resistor 0603(1608)	2	10K	RESC0603(1608)_N
R3, R4	-	any 300R resistor 0805(2012)	2	300R 5% 0805(2012)	RESC0805(2012)_L
R6	-	any 0R resistor 0805(2012)	1	Jumper 0805(2012)	RESC0805(2012)_N
R7, R8	-	any 1K resistor 0603(1608)	2	1K	RESC0603(1608)_M
C1, C10	-	any 10uF cap 0805(2012)	1	CAP 10uF 25V 0805(2012)	CAPC0805(2012)145_N
C2, C3, C4, C6, C7, C9, C11	-	any 100nF cap 0603(1608)	5	CAP 100nF 25V 0603(1608)	CAPC0603(1608)100_M
C5	-	any 22pF cap 0201(0603)	1	22pF	CAPC0201(0603)33_M
C8	-	any 1uF cap 0603(1608)	1	CAP 1uF 25V 0603(1608)	CAPC0603(1608)100_M
U1	ATMEGA328P-AU	Amtel	1	ATmega328P-AU	32A_M
U2	DS3234SN#	Maxim Integrated	1	DS3234S#*	W20#H2_L
U3	ADXL345BCCZ	Analog Devices	1	ADXL345BCCZ	ADI-CC-14-1_V
U4	NC7SU04M5X	Fairchild	1	Not Gate	SOT23-5_N
U5	MPL3115A2	Freescale	1	MPL3115A2	FREE-2153-01_V
X1	CSTCE8M00G55-R0	Murata	1	CSTCE16M0V53-R0*	MURA-CSTCE_V-3_V
LED	APG1608CGKC/T	Kingbright	1	APG1608CGKC/T	KING-LED0603-25-GREEN_V
ERR	APG1608SURKC/T	Kingbright	1	APG1608SURKC/T	KING-LED0603-25-RED_V
J1	101-00660-68-6-1	Amphenol	1	MICROSD CONN	custom
PWR	JS202011CQN	C&K	1	PWR SW	custom
REC, RST	KMR221NG LFS	C&K	2	SW1, SW2	custom
BH1	BK-885	MPD	1	RTC Battery 3V	custom
BH2	BH1000G	MPD	1	BATT 3V	custom

*The discrepancy between the P/N and the Comment is intentional.
This is due to the footprint availability in the Altium Vault. The MPN and Digikey PN is the correct part. The comment is only here for reference to the schematic.

NOTE:
There is no R2 in the BOM as it is an ommited part in this design.

Digikey P/N	Components
-	10K 0.1W 5% 0603 (1608 Metric) SMD
-	300R 0.125W 5% 0805 (2012 Metric) SMD
-	Jumper 0805 (2012 Metric)
-	1K 0.1W 1% 0603 (1608 Metric) SMD
-	CAP 10uF 25V ±20% 0805 (2012 Metric) Thickness 1.45mm SMD
-	CAP 100nF 25V -20% to +80% 0603 (1608 Metric) Thickness 1mm SMD
-	CAP 22pF 50V ±5% 0201 (0603 Metric) Thickness 0.33mm SMD
-	CAP 1uF 25V -20% to +80% 0603 (1608 Metric) Thickness 1mm SMD
ATMEGA328P-AU-ND	8-bit AVR Microcontroller, 32KB Flash, 1KB EEPROM, 2KB SRAM, 32-pin TQFP, Industrial Grade (-40°C to 85°C)
DS3234SN#-ND	Extremely Accurate SPI Bus Real-Time Clock with Integrated Crystal and SRAM, 20-Pin SO, 0 to 70 degC, RoHS Qualified
ADXL345BCCZ-ND	3-Axis, +/-2 g / +/-4 g / +/-8 g / +/-16 g Digital Accelerometer with Digital Output, 1.6 KHz BW, Industrial, 14-pin LGA, Tray
NC7SU04M5XCT-ND	IC INVERTER UNBUFFERED SOT23-5
MPL3115A2-ND	Xtrinsic I2C Precision Altimeter, 1.95 to 3.6 V, -40 to 85 degC, 8-Pin LGA (2153-01), RoHS, Tray
490-1195-1-ND	Ceramic Resonator, 8 MHz with Built-in Capacitance
754-1357-1-ND	LED, SMT, 0603(1608), 0.25mm Thickness, Green
754-1359-1-ND	Ultra Thin Hyper Red SMD Chip LED Lamp, 2 to 2.5 V, -40 to 85 degC, Body 1.6 x 0.8 mm, 0.28 mm Thickness, RoHS, Tape and Reel
101-00660-68-6-ND	CONN MICRO SD CARD PUSH-PUSH R/A
401-2001-ND	SWITCH SLIDE DPDT 300mA 6V
CKN10244CT-ND	SWITCH TACTILE SPST-NO 0.05A 32V
BK0885-ND	HOLDER COIN CELL 12MM SMD
BH1000G-ND	HOLDER BATTERY FOR 24.5mm CELL