

ATM3405 BGA Eval Board (JLink OB)

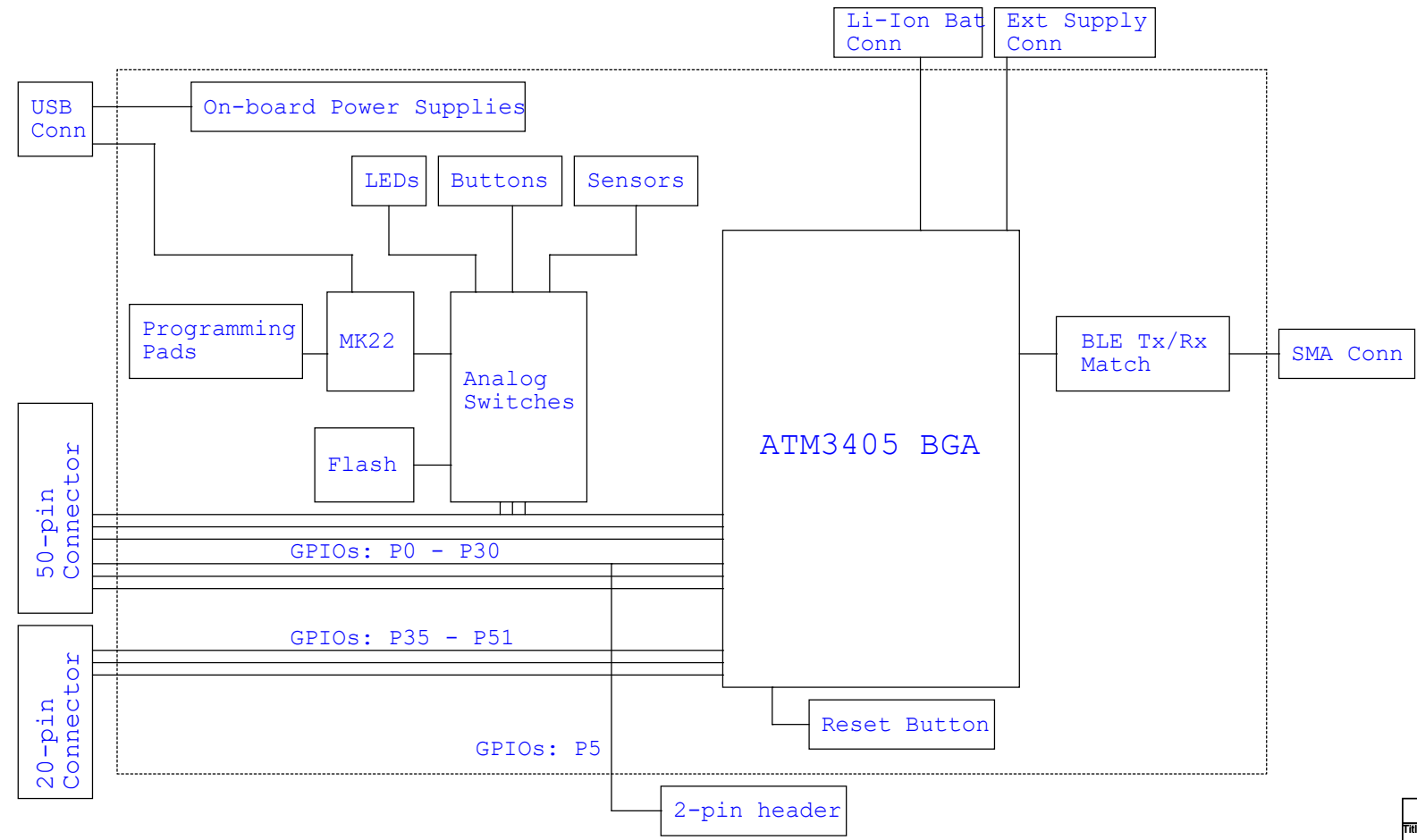
Release Date	Revision	Design Eng.	Design Notes
11/04/24	-00	Chris Tsailin	Initial release, based on the latest Perth 3430e EVB, with VDDIO-VCCIO tracking circuit added
3/18/25	-01	Andy Dao	L14 changed to 3.3nH; C2, C8 changed to DNS, C68 to 1uF; Channel Sounding: C11=4.7uF, C13=10uF;
6/27/25	-02	Joe Chen	1. C6 changed from 1.0uF(0402) to 4.7uF(0402) 2. C11 changed from 4.7uF(0402) to 1.0uF(0402) 3. C68 changed from 1uF(0402) to 0ohm(0402)
9/29/25	-04	Andy Dao	1. C5 changed from 4.7uF(0402) to 10uF(0402) 2. C6 changed from 4.7uF(0402) to 10uF(0402)

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ATMOSIC TECHNOLOGIES INC		
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Block Diagram



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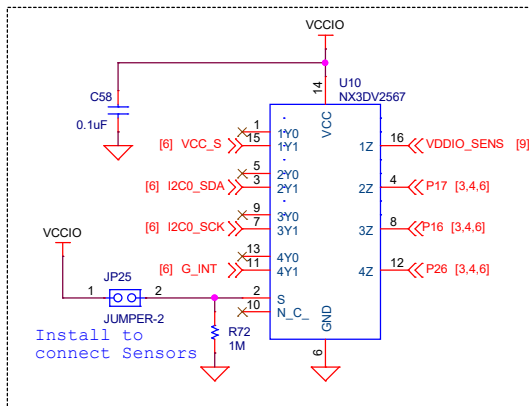
GPIO MUX

[3,6] P0_GPIO >> <<P0 [3,4,6]
 [3,6] P1_GPIO >> <<P1 [3,4,6]
 [3,6] P2_GPIO >> <<P2 [3,6]
 [3,6] P3_GPIO >> <<P3 [3,6]
 [3,6] P4_GPIO >> <<P4 [3,6]
 [3,6] P5_GPIO >> <<P5 [3,4,6]
 [3,6] P6_GPIO >> <<P6 [3,4,6]
 [3,6] P7_GPIO >> <<P7 [3,6]
 [3,6,7] P8_GPIO >> <<P8 [3,6,7]
 [3,6] P9_GPIO >> <<P9 [3,4,6]
 [3,6] P10_GPIO >> <<P10 [3,4,6]
 [3,6] P11_GPIO >> <<P11 [3,6]
 [3,6] P12_GPIO >> <<P12 [3,4,6]
 [3,6] P13_GPIO >> <<P13 [3,4,6]
 [3,6] P14_GPIO >> <<P14 [3,6]

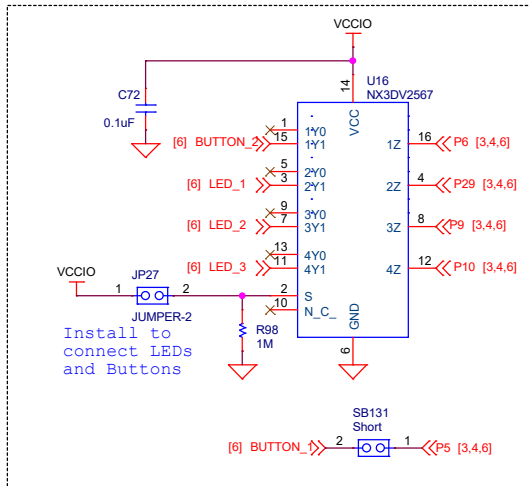
[3,6] P15_GPIO >> <<P15 [3,4,6]
 [3,6] P16_GPIO >> <<P16 [3,4,6]
 [3,6] P17_GPIO >> <<P17 [3,4,6]
 [3,6] P18_GPIO >> <<P18 [3,4,6]
 [3,6] P19_GPIO >> <<P19 [3,4,6]
 [3,6] P20_GPIO >> <<P20 [3,4,6]
 [3,6] P21_GPIO >> <<P21 [3,4,6]
 [3,6] P22_GPIO >> <<P22 [3,4,6]
 [3,6] P23_GPIO >> <<P23 [3,4,6]
 [3,6] P24_GPIO >> <<P24 [3,6]
 [3,6] P25_GPIO >> <<P25 [3,4,6]
 [3,6] P26_GPIO >> <<P26 [3,4,6]
 [3,6] P27_GPIO >> <<P27 [3,4,6]
 [3,6] P28_GPIO >> <<P28 [3,6]
 [3,6] P29_GPIO >> <<P29 [3,4,6]

[3,6] P30_GPIO >> <<P30 [3,4,6]
 [5] P35_GPIO >> <<P35 [3,4,6]
 [5] P36_GPIO >> <<P36 [3,4,6]
 [5] P37_GPIO >> <<P37 [3,4,6]
 [5] P38_GPIO >> <<P38 [3,4,6]
 [5] P39_GPIO >> <<P39 [3,4,6]
 [5] P40_GPIO >> <<P40 [3,4,6]
 [5] P41_GPIO >> <<P41 [3,4,6]
 [5] P42_GPIO >> <<P42 [3,4,6]
 [5] P43_GPIO >> <<P43 [3,4,6]
 [5] P44_GPIO >> <<P44 [3,4,6]
 [5] P45_GPIO >> <<P45 [3,4,6]
 [5] P46_GPIO >> <<P46 [3,4,6]
 [5] P47_GPIO >> <<P47 [3,4,6]
 [5] P48_GPIO >> <<P48 [3,4,6]
 [5] P49_GPIO >> <<P49 [3,4,6]
 [5] P50_GPIO >> <<P50 [3,4,6]
 [5] P51_GPIO >> <<P51 [3,4,6]

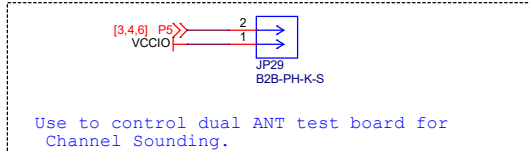
CONNECT SENSORS TO ATM3405 BGA



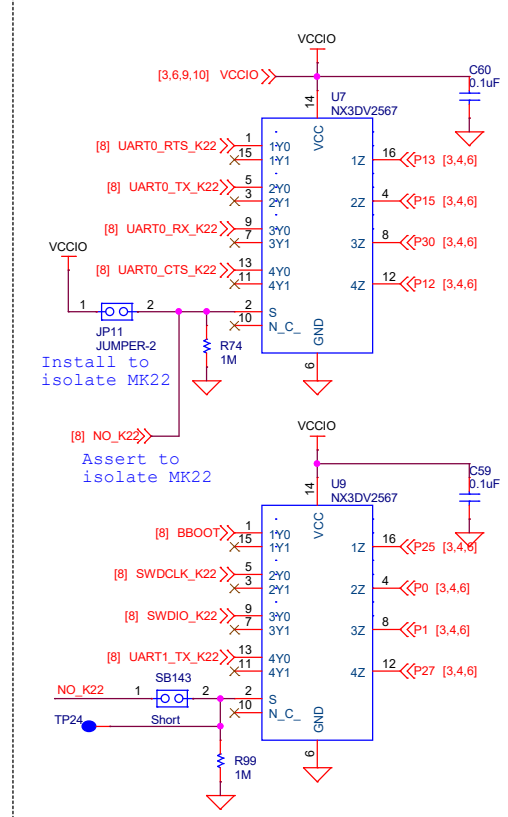
CONNECT LEDS/BUTTONS TO ATM3405 BGA



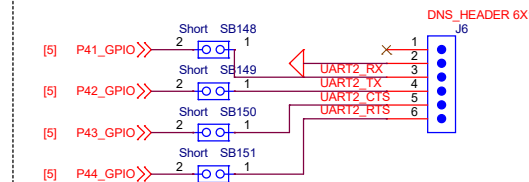
Control for Dual ANT Test Board



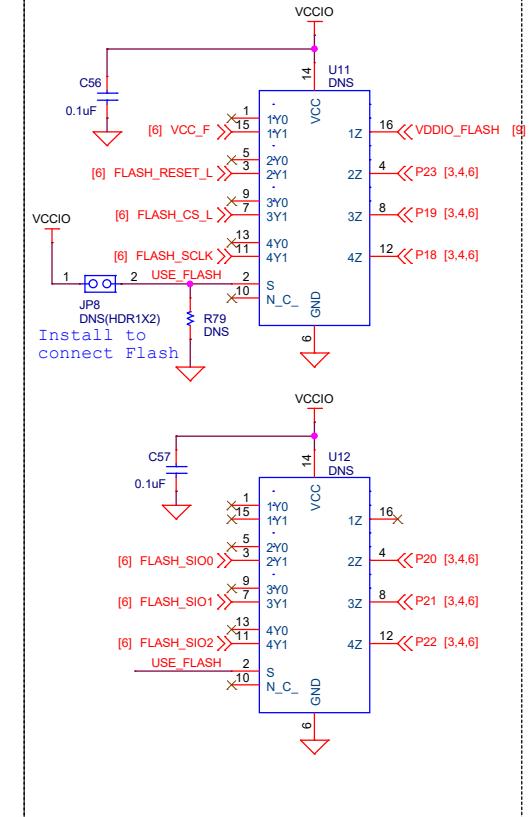
ISOLATE MK22 FROM ATM3405 BGA



Connected to external USB dongle for UART2



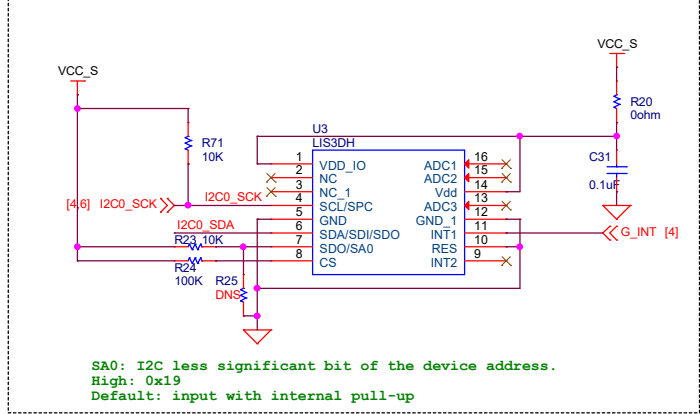
CONNECT FLASH TO ATM3405 BGA



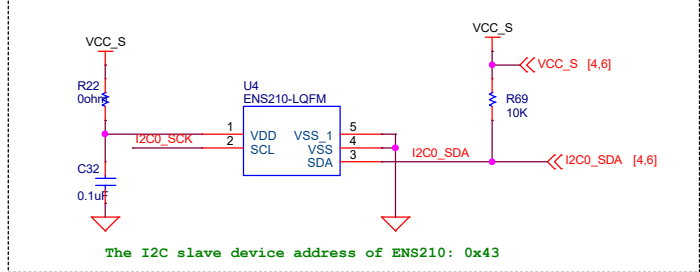
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ATM3405 BGA Eval Board (JLink OB) - GPIO Mapping, Analog switches			
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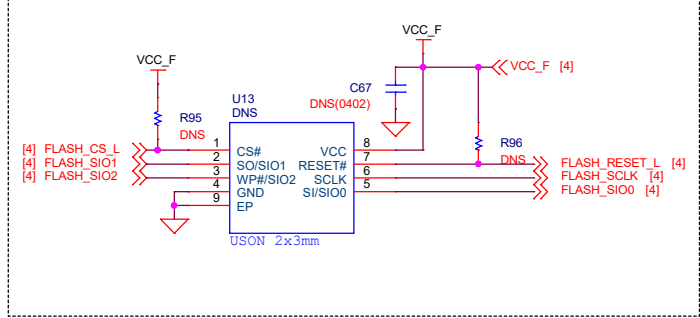
MOTION SENSOR



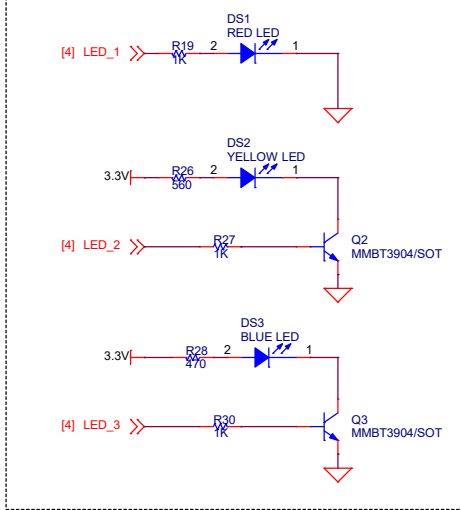
TEMP/HUM SENSOR



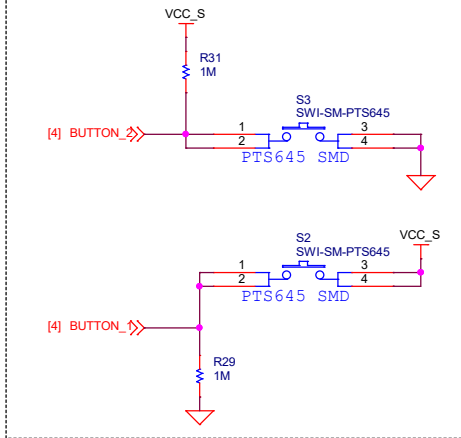
FLASH



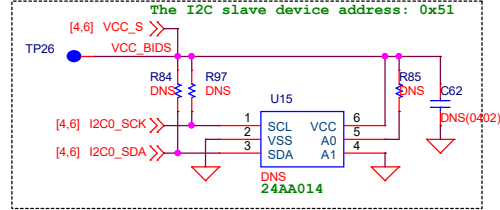
LEDS



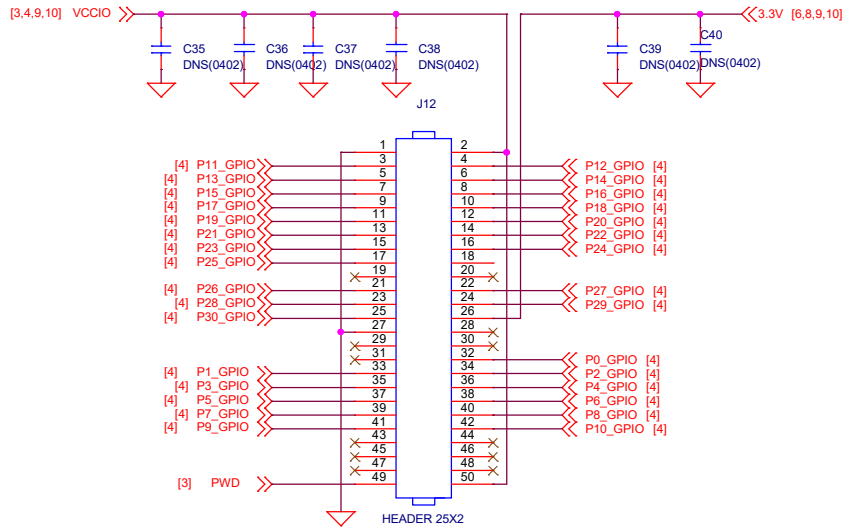
PUSH BUTTONS



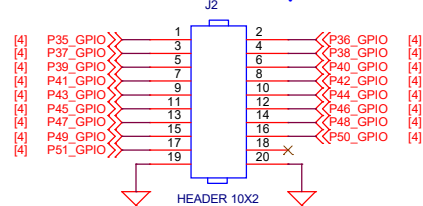
BIDS (1Kbits)



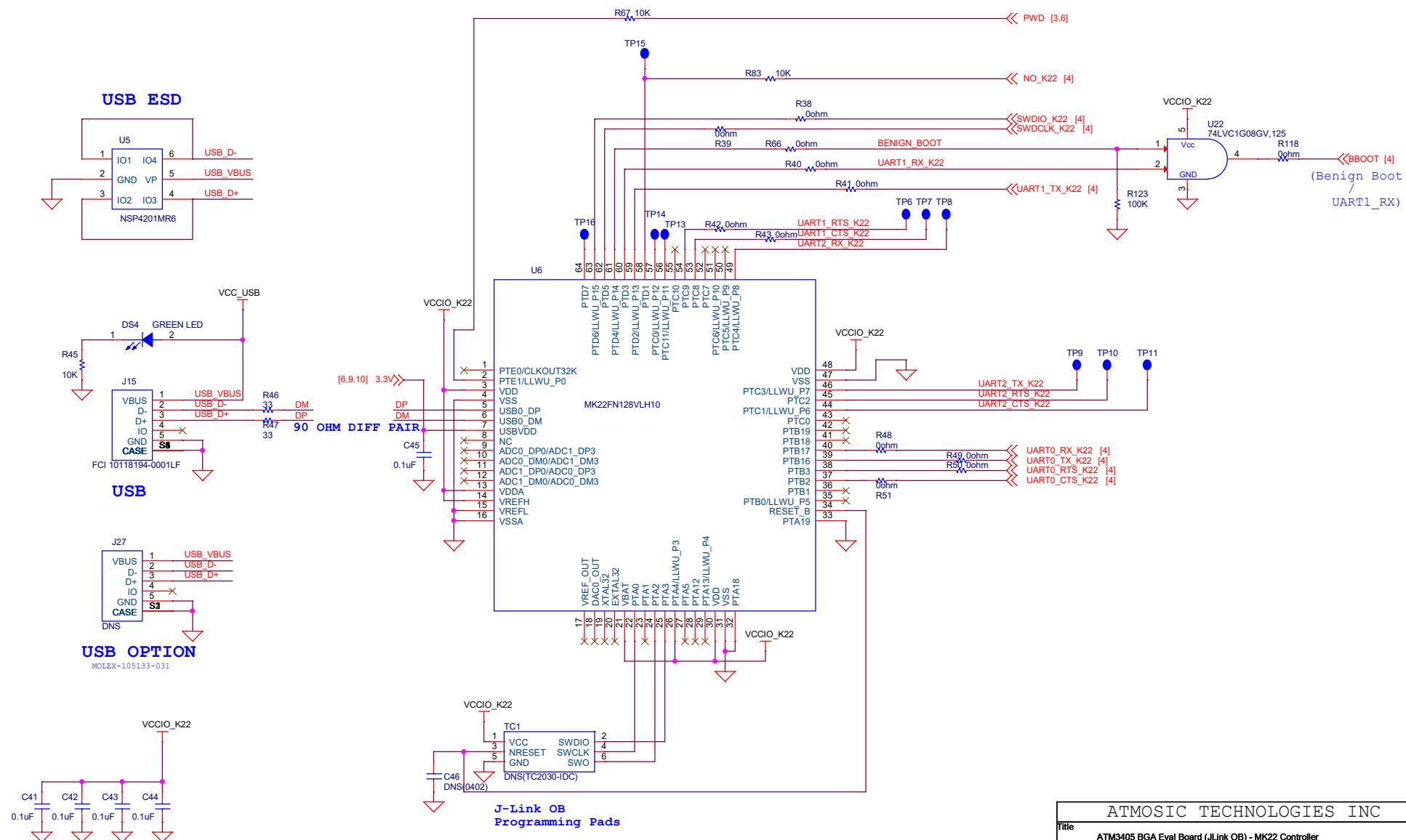
50-PIN CONNECTOR I/O INTERFACE

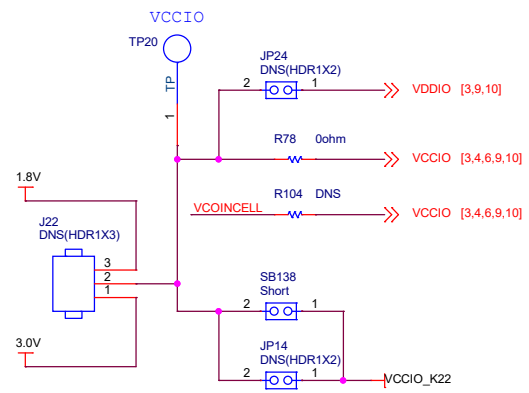
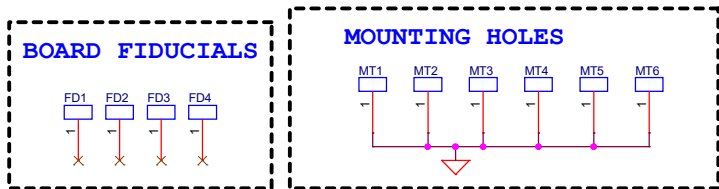
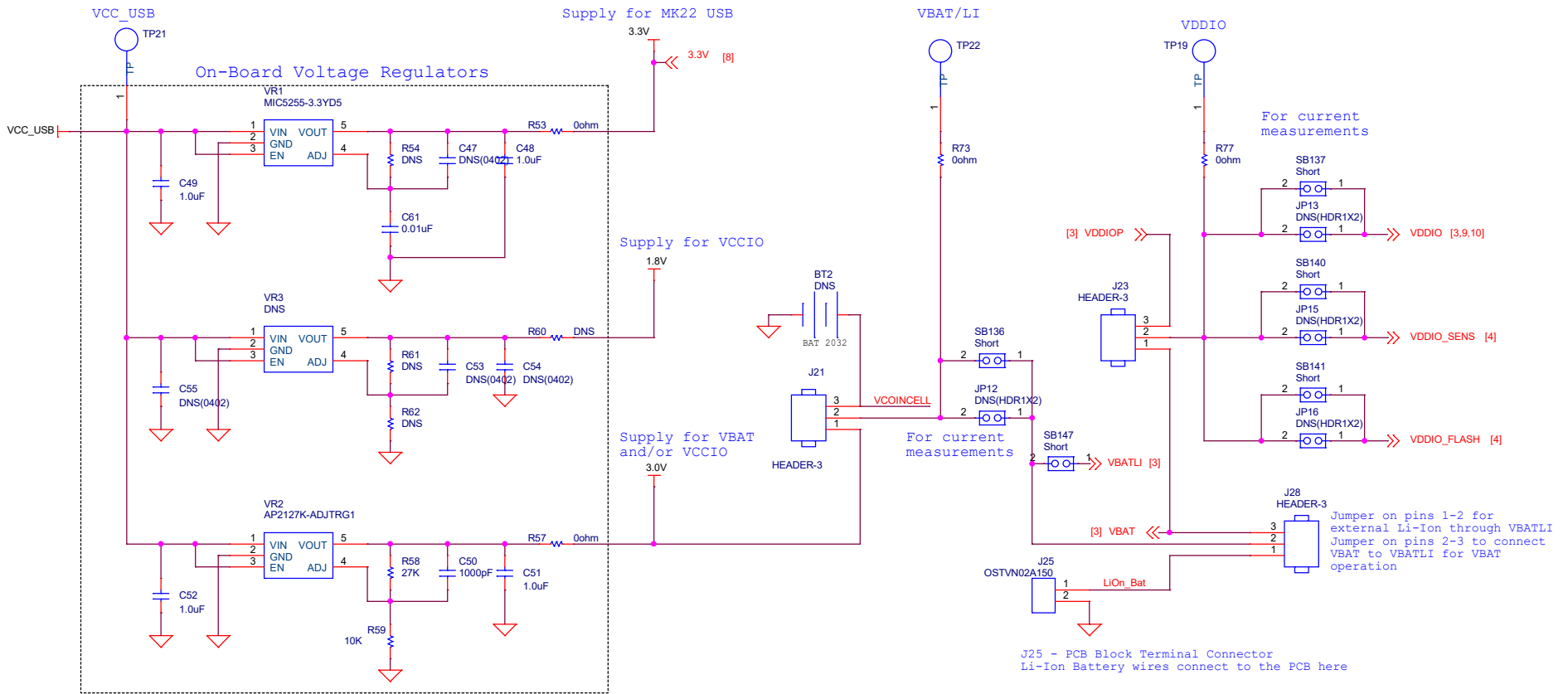


20-PIN CONNECTOR I/O INTERFACE



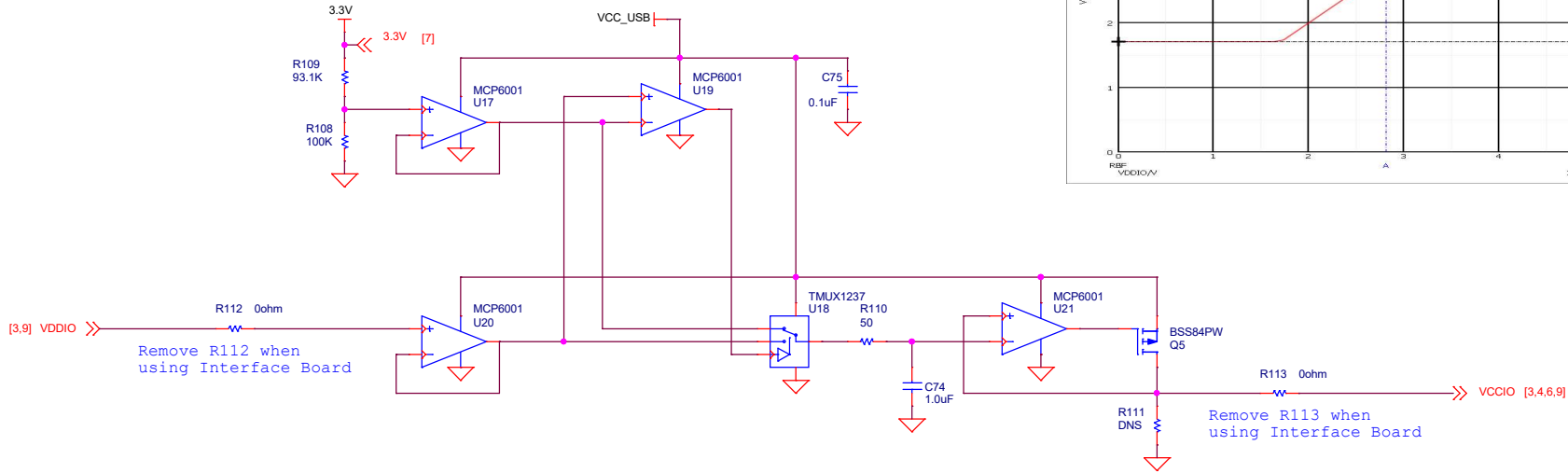
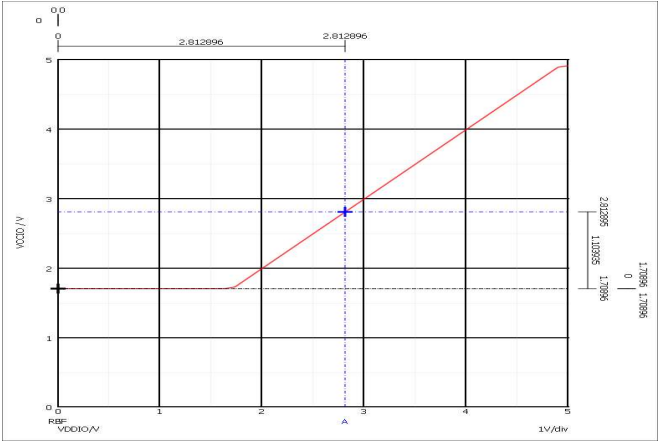
ATMOSIC TECHNOLOGIES INC			
Title Sensors, Flash, LEDs, Buttons, I/O Interface Connector			
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VDDIO < 1.72V: VCCIO = 1.71V
VDDIO >=1.72V: VCCIO = VDDIO



Title			
ATM3405 BGA Eval Board (JLink OB) - VDDIO-VCCIO tracking circuit			
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