ACCELEROMETER 4CH MCDL BOARD REV2.0

1.0 2.0	2018.10.30 2019.09.04	First Version (4CH_DAQ_A8K01AEF1) Added DSP & Board name was changed from DAQ to MCDL
		MCDL(Multi-Channel Data Logger)

Description

Revision

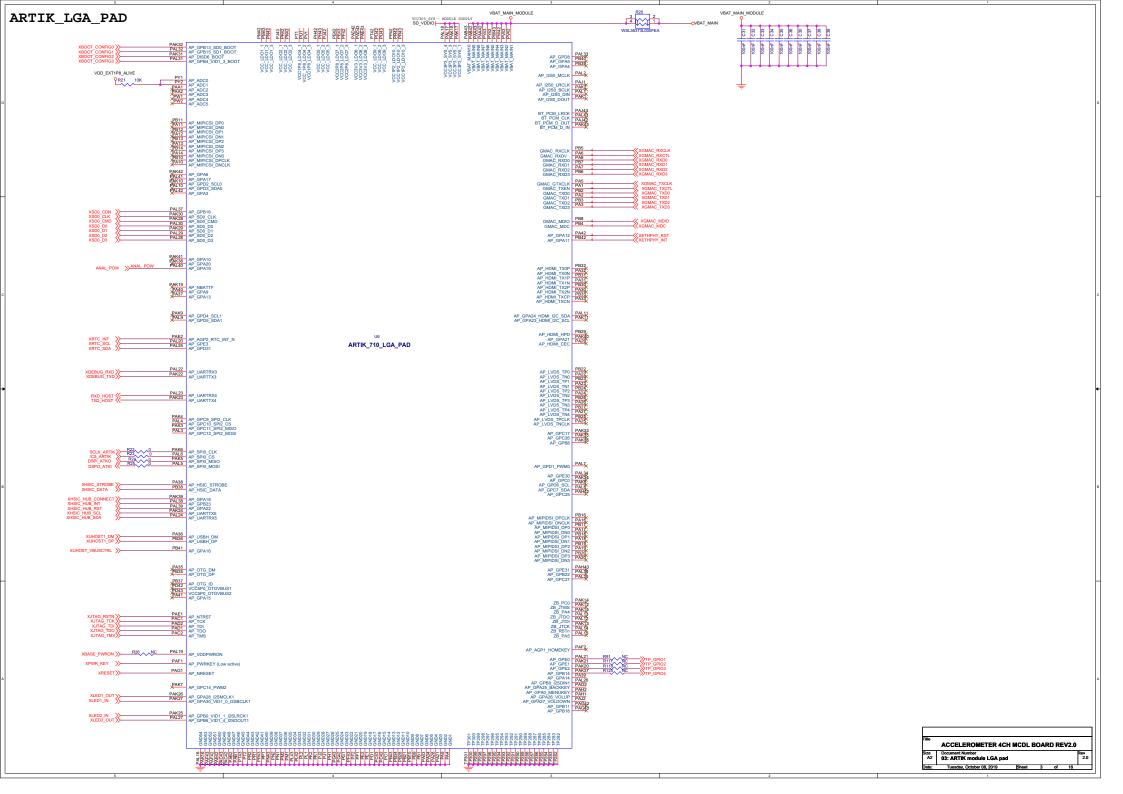
Date

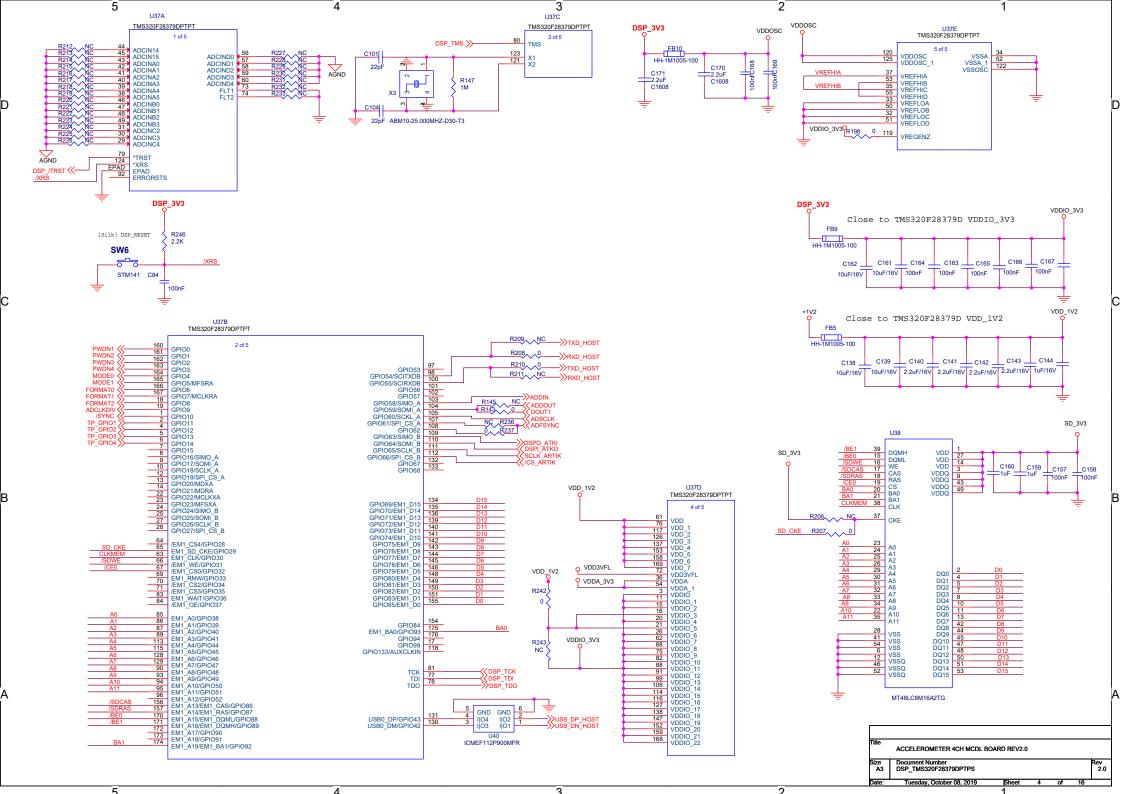
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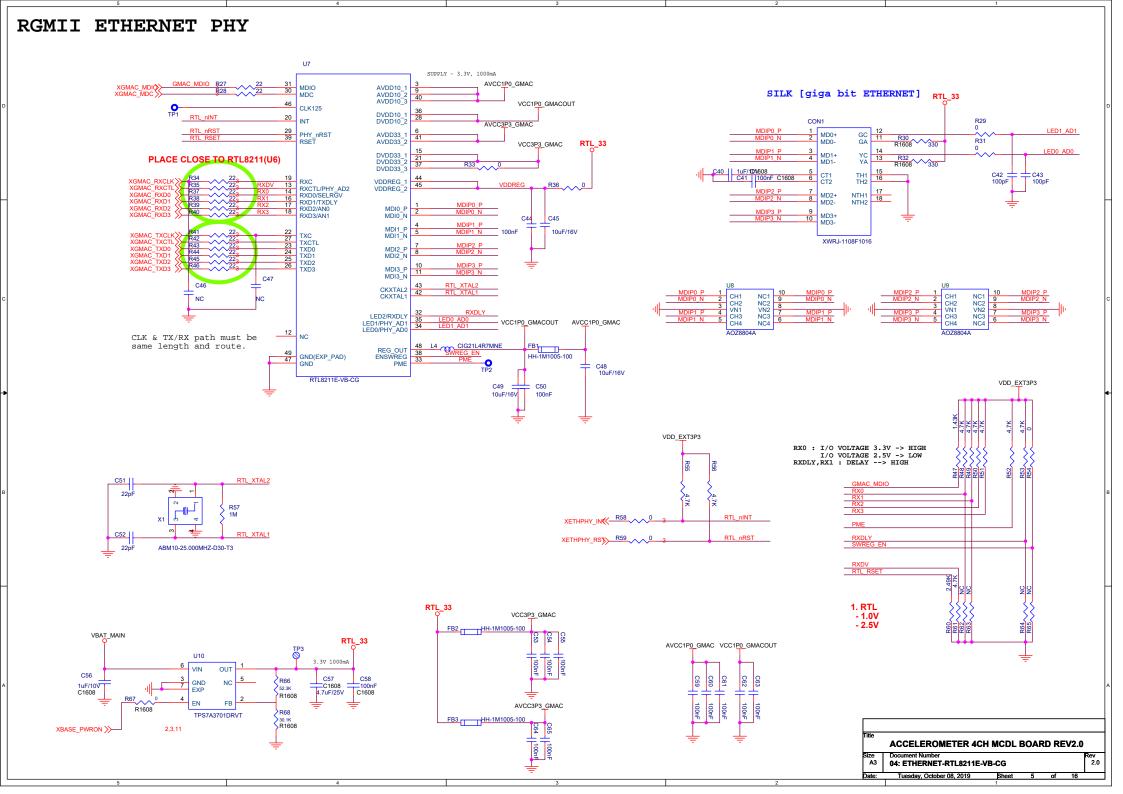
This schematic was designed using standard symbol.

Title						
	ACCELEROMETER 4C	H MCDL I	BOAF	RD RE	V2.0)
Size A3	Document Number 01: Title					Rev 2.0
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Power MAIN POWER SILK : POWER SILK :SW DSP Main block Power supply DC12V VBAT_MAIN +1V2 DSP 3V3 U39 TPS62080ADSGT DC JACK D1. D4. D5. D13. D15 1124 L14 LQH3NPN1R0NJ0 3.3V 1000mA R202 VIN EN MODE GND VIN OUT ۱± ع C129 C133 C1608 4.7uF/25V 22 0154008.DR R199 VOS FB 1uF/10V C1608 GND 100nF C1608 C136 FXP R1608 2.2uF = C1608 R205 R200 _ C137 TPS7A3701DRVT 64.9K DC-JACK/DC-005 30.1K R1608 10uF/16V 24V/5A 36V/3A C7 470nF/1608/25V 36V/1A DC12V DC5VVBAT MAIN 470nF/1608/25V VDDA_3V3 DSP 3V3 VDDIO 3V3 DSP 3V3 BOOT L1 10uH/SLF10145 L2 22uH/SLF7045 B001 R3 EN/SYNC HH-1M1005-100 R5 HH-1M1005-100 100K C13 56pF/1608/25V C152 2.2uF C1608 C14 47uF/A/3216/10V C174 AGND VCC AGND 2.2uF C1608 2.2uF/2012/25V LMR23630ADDAR/SO-8 2.2uF/2012/25V LMR23610ADDAR/SO-8 C1608 47uF/A/3216/10V 19.6K ANAL_POW >>> ANAL_POW SD_3V3 VDD3VFL DSP_3V3 DSP_3V3 FB4 HH-1M1005-100 C149 HH-1M1005-100 C15 C153 2.2uF C1608 C156 =2.2uF C1608 Net Name was changed from DC24V to DC12V C173 C175 =2.2uF C1608 VBAT MAIN =2.2uF C1608 6.5V/1A DC5V_ADD R11 POWER LED 470 AP_VDDIO SILK : POWER ON C12 2.2uF OUT C15 470nF/25V LED2 AP VDDIO SD VDDIO C1608 FB/SNS GND R10 TPS7A8101DRB/SON8 BLUE/1608 470nF/25\ 9/30 디지털그라운드 변경. Q1 MMBT3904 AP_VDDIO VDD_EXT3P3_ALIVE AP_VDDIO VDD_EXT3P3_ALIVE L3 POWER S/W RESET S/W CDRH2D14NP-2R2NC 3.3V, 600mA C24 VIN SW R13 4.7uF/1608/16V 100K GND 100K XBASE_PWRON > R15 1K EN FB SILK : Reset ->>XPWR KEY AP_VDDIO - RC Filter : DELAY 33uSEC LM3671MF-3.3 SW1 EST-1101NS(WHITE) TEA10402V15A0 SW2 TEA10402V15A0 1uF/16V STM1415 SILK : Power VDD_EXT3P3 ACCELEROMETER 4CH MCDL BOARD REV2.0 02: MAIN POWER Friday, December 06, 2019



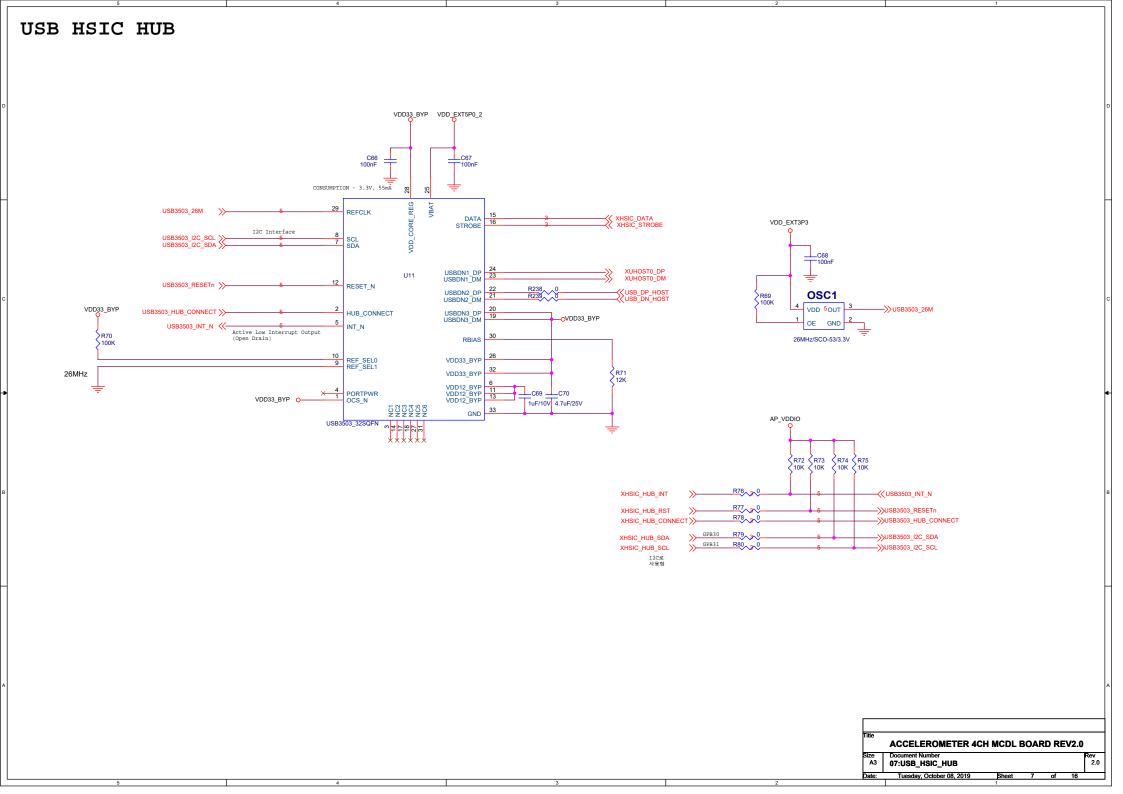




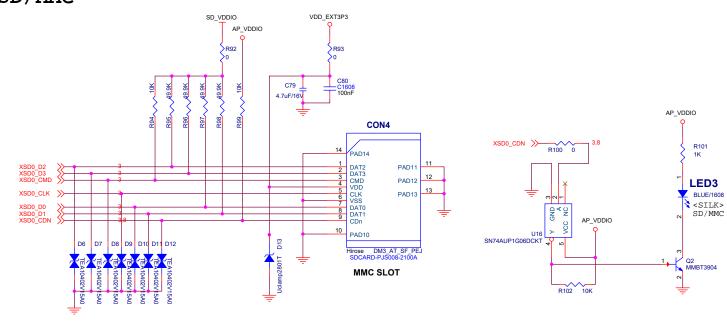
USB2.0 connector USB1_VBUS L5 BLM18KG300TN1 VDD_EXT5P0_1 ____C71 U12 USB1_VBUS 10uF/10V ICMEF112P900MFR OUT VBUS 0 7 VBUS2 B2 B2 D2+ B3 GND 0 0 GND2 B4 A1 A2 A3 A4 GND XUHOST1_DM XUHOST1_DP XUHOST_VBUSCTRL >>R81 C72 EN nOC 4.7uF/25V 1uF/16V/C1608 R82 TPS2051BDBV 100K USB0_VBUS L6 BLM18KG300TN1 Uclamp2801T VDD_EXT5P0_1 C74 U14 USB0_VBUS 10uF/10V ICMEF112P900MFR OUT 5 4 3 I|O4 I|O3 I|O3 I|O1 GND XUHOSTO_DM XUHOSTO_DP XUHOST_VBUSCTRL >>R83 C75 EN nOC 4.7uF/25V 1uF/16V/C1608 R84 TPS2051BDBV 100K **ACCELEROMETER 4CH MCDL BOARD REV2.0** Document Number 06: DUAL USB2.O CONN Rev 2.0

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Sheet

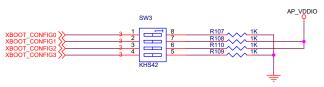






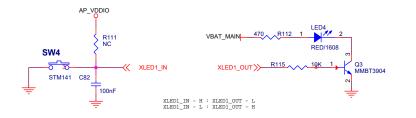


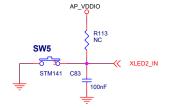
SW3	Comment	eMMC 1st Boot	SD 1st Boot	USB 1st Boot
1	-	Off	Off	On
2	-	Off	Off	On
3	HW Rev>1.0	Х	Х	Х
4		Off	On	х

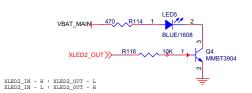


TFX-03/32.768KHz/9pF TFX-03/32.768KHz/9pF

XLED TEST





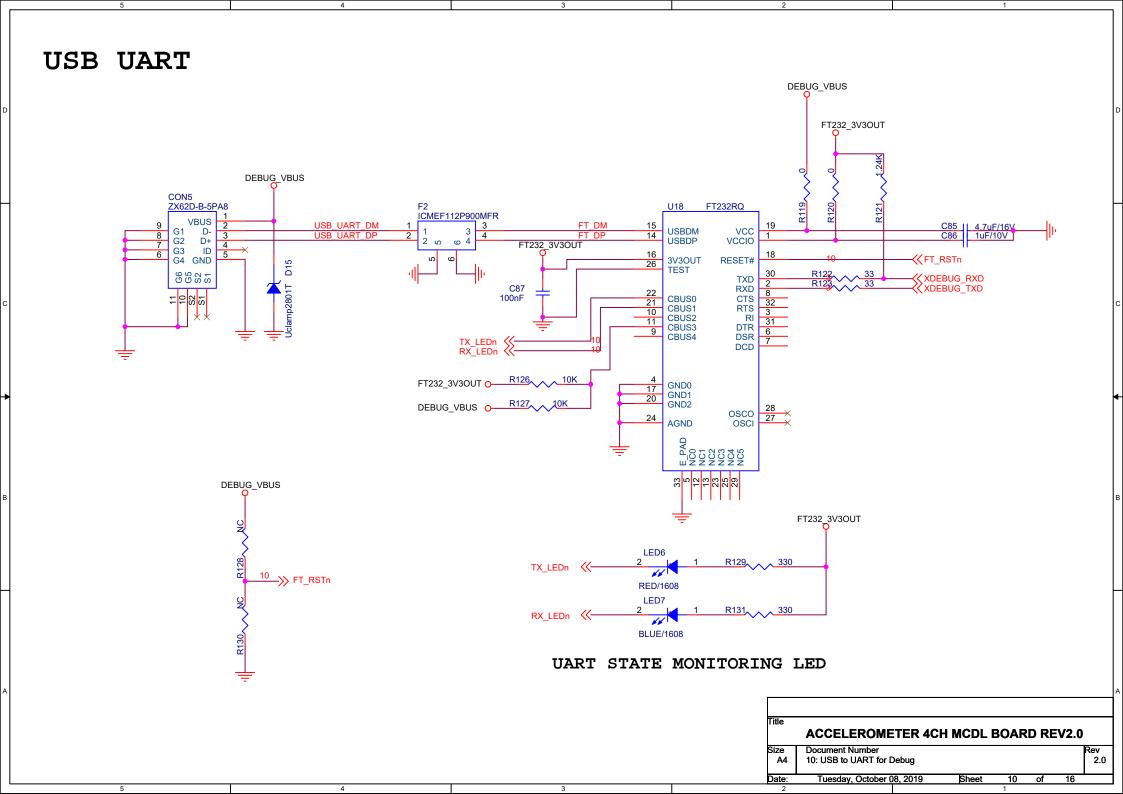


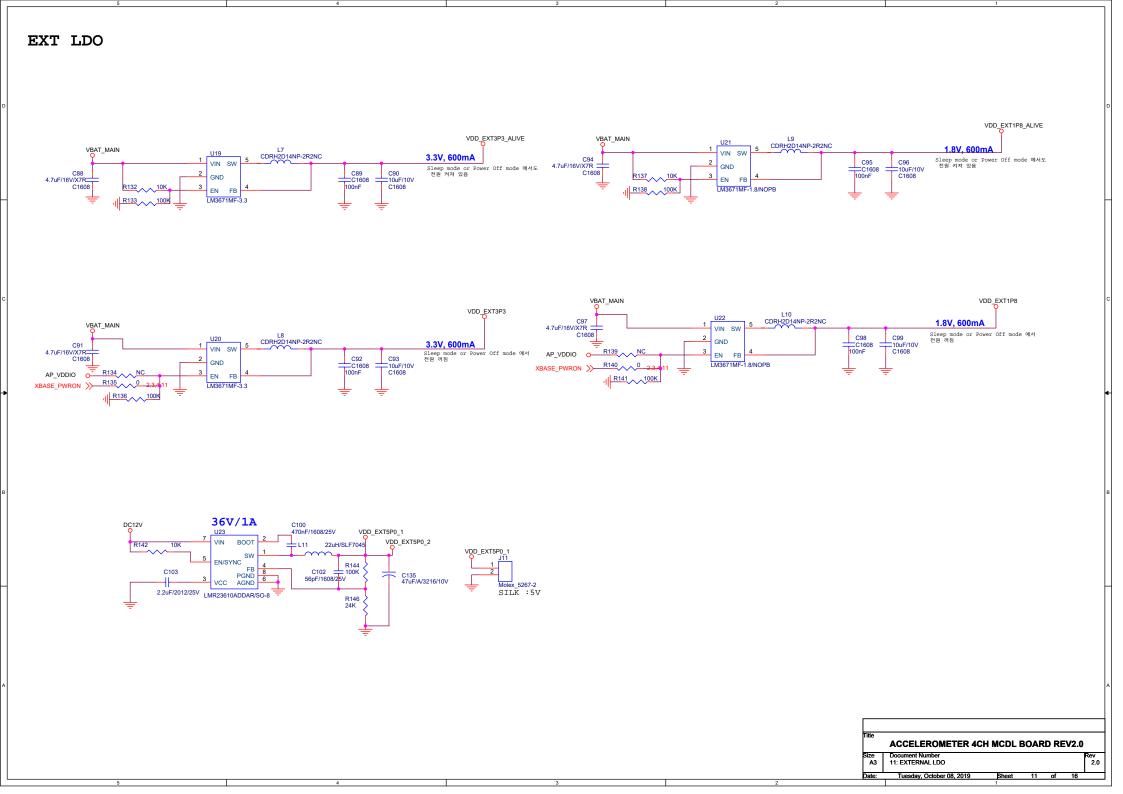


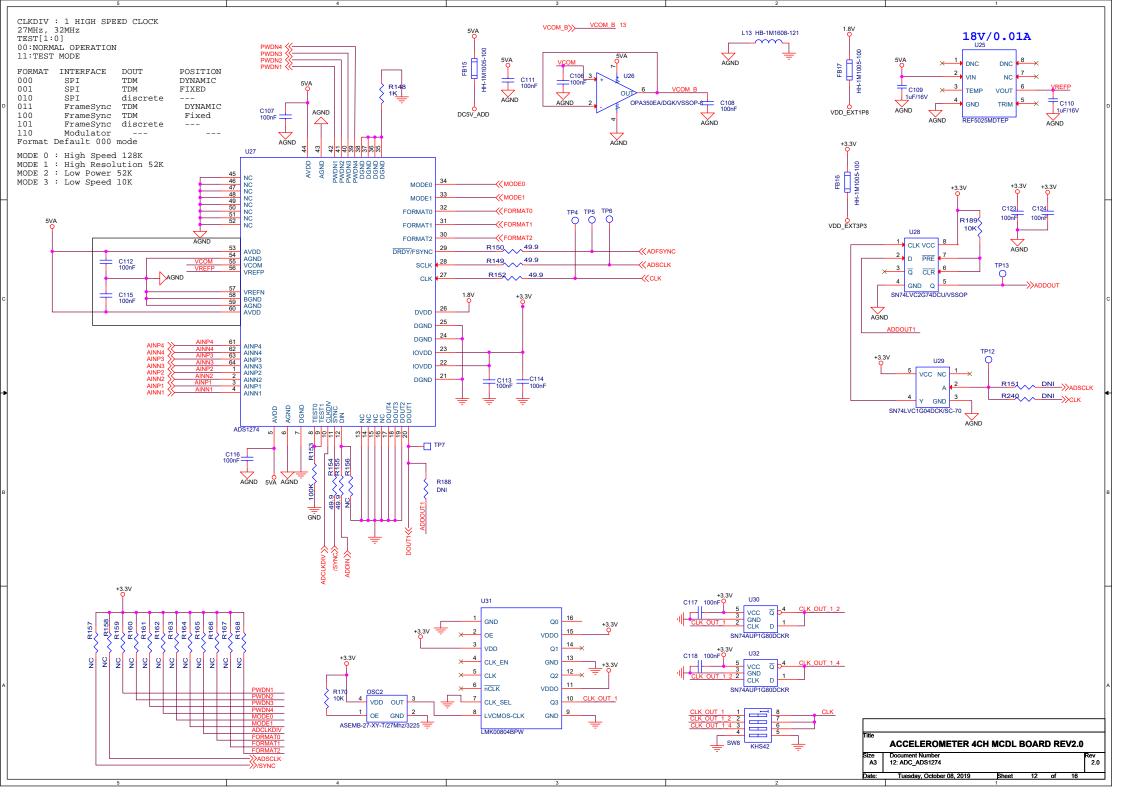


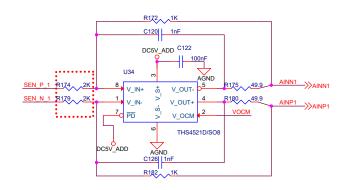


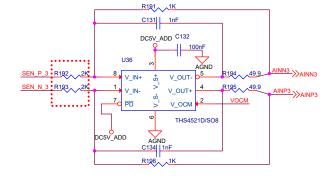
Mount Hole (Φ3.2)

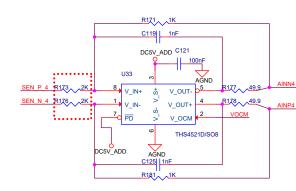


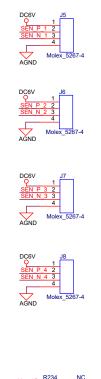












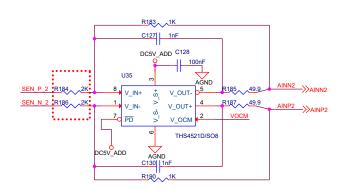
AGND R235

ACCELEROMETER 4CH MCDL BOARD REV2.0

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Document Number 13: SENSOR AMP

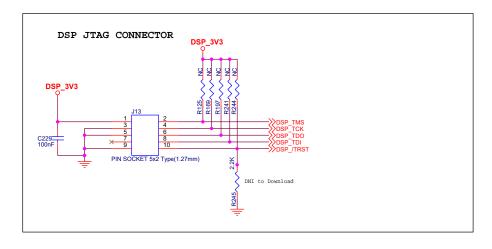
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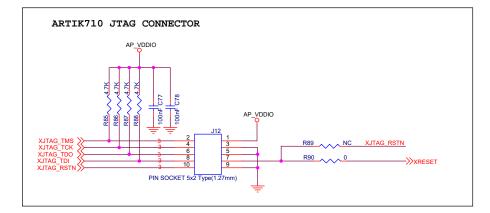


1K was changed to 2K for adjusting the signal level from +/-5V to +/-2.5V $\,$

REMOVED MINI PCIe BLOCK DUE TO NOT USE IT 20.Sep.2019 **ACCELEROMETER 4CH MCDL BOARD REV2.0** Document Number 14: DaughterBoard_LTE_Removed Tuesday, October 08, 2019

ARTIK JTAG





		5	4 :			2 1	
	REV #.#	DATE	REVISION HISTORY	REV #.#	DATE	REVISION HISTORY	
	0.1	18.10.23	Created.				
		18.10.24	Modify All				
	0.3	18.11.02	FIXED Schematic				
	1.0	18.11.30	GPIO_B11, GPIO_B18 disconnect Changed ADFSYNC/DOU1 Modified ADC Block D-Flipflop, SCLK Line				
	2.0	19.09.25	Added DSP(TMS320S28379D) & peripheral Deleted LTB Block(Mini PCIe) Added connection DSP & ARTIK				
С							С
→							•
A							A
							4
						ACCELEROMETER 4CH MCDL BOARD REV2.0 Size Document Number A3 16: Revision History Revision History	v 2.0
		5	4	3		Date: Tuesday, October 08, 2019 Sheet 16 of 16	\exists