

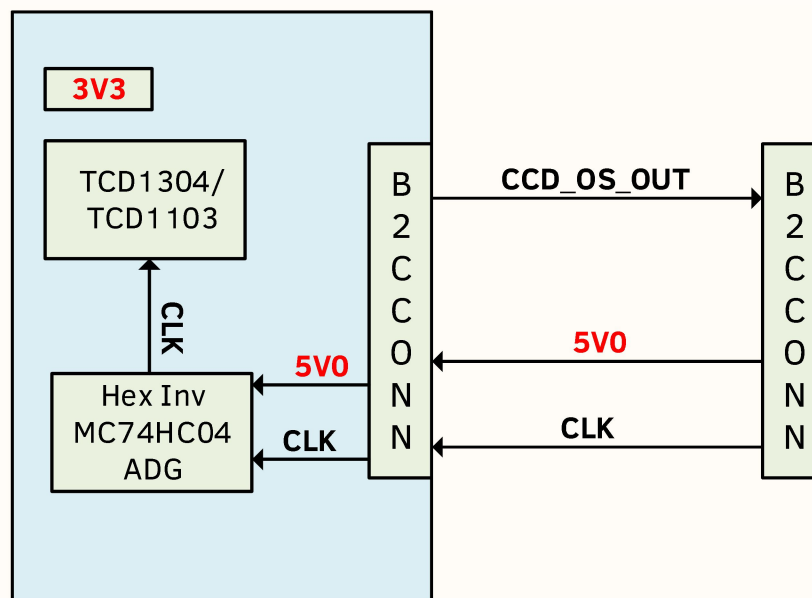
Table of Content

Page 1	Hierarchical Diagram
Page 2	Index
Page 3	Revision History
Page 4	Block Diagram
Page 5	Power Tree
Page 6	Sensor_Conn_Power_Supply
Page 7	Accessories

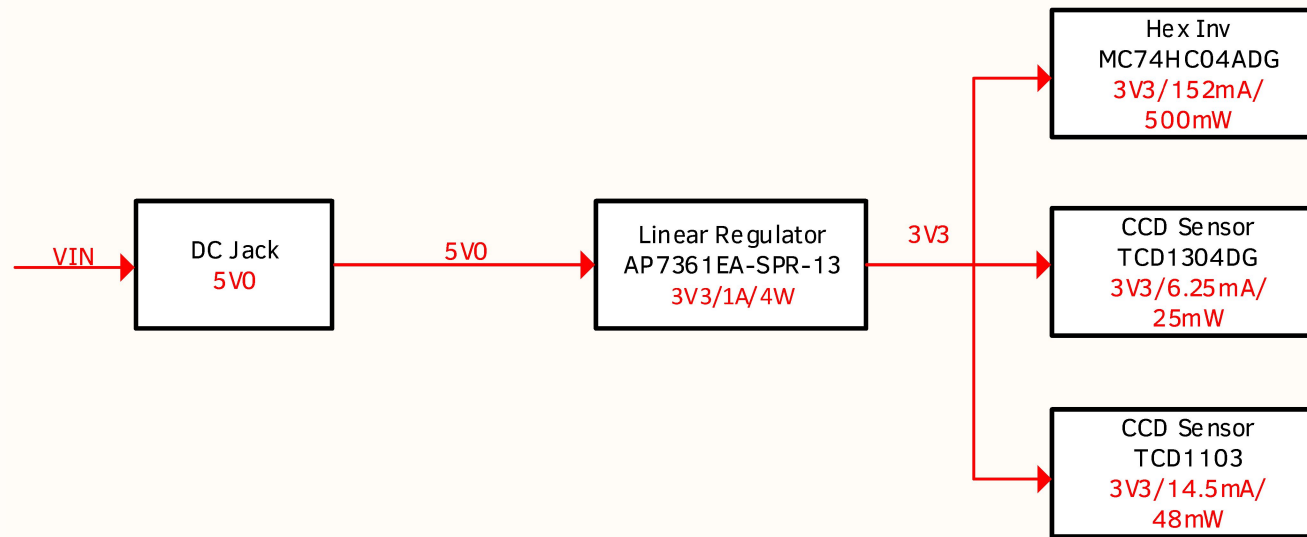
Revision History

Rev. Code	Date	By	Description
0.1	25-10-2022	Keerthi	Draft Version
0.2	29-11-2022	Keerthi	Initial Version
1.0	24-12-2022	Keerthi	Initial Release

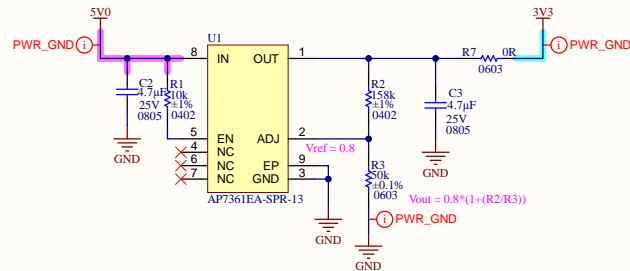
BLOCK DIAGRAM



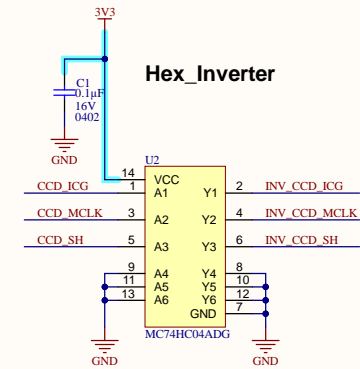
POWER TREE



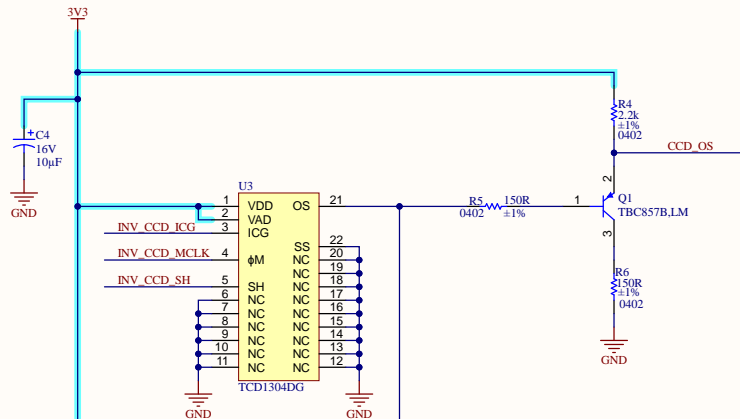
LDO_3V3/1A



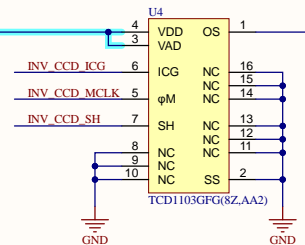
Hex_Inverter



CCD_Sensor_TCD1304

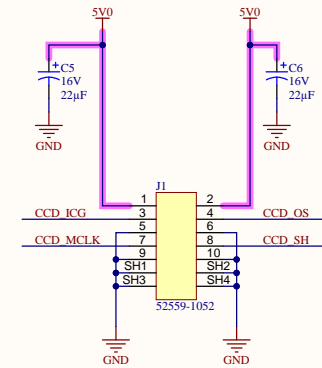


CCD_Sensor_TCD1103

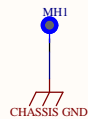


Any of the one sensor need to assembled

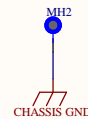
B2C_CONN



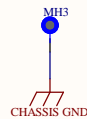
Mounting Hole_3MM



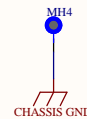
Mounting Hole_3MM



Mounting Hole_3MM



Mounting Hole_3MM



avêch
emphasis on embedded

Board_Name : DERBI_Sensor_Board.PrjPcb

Title_Name : Sensor_Conn_Power_Supply.SchDoc

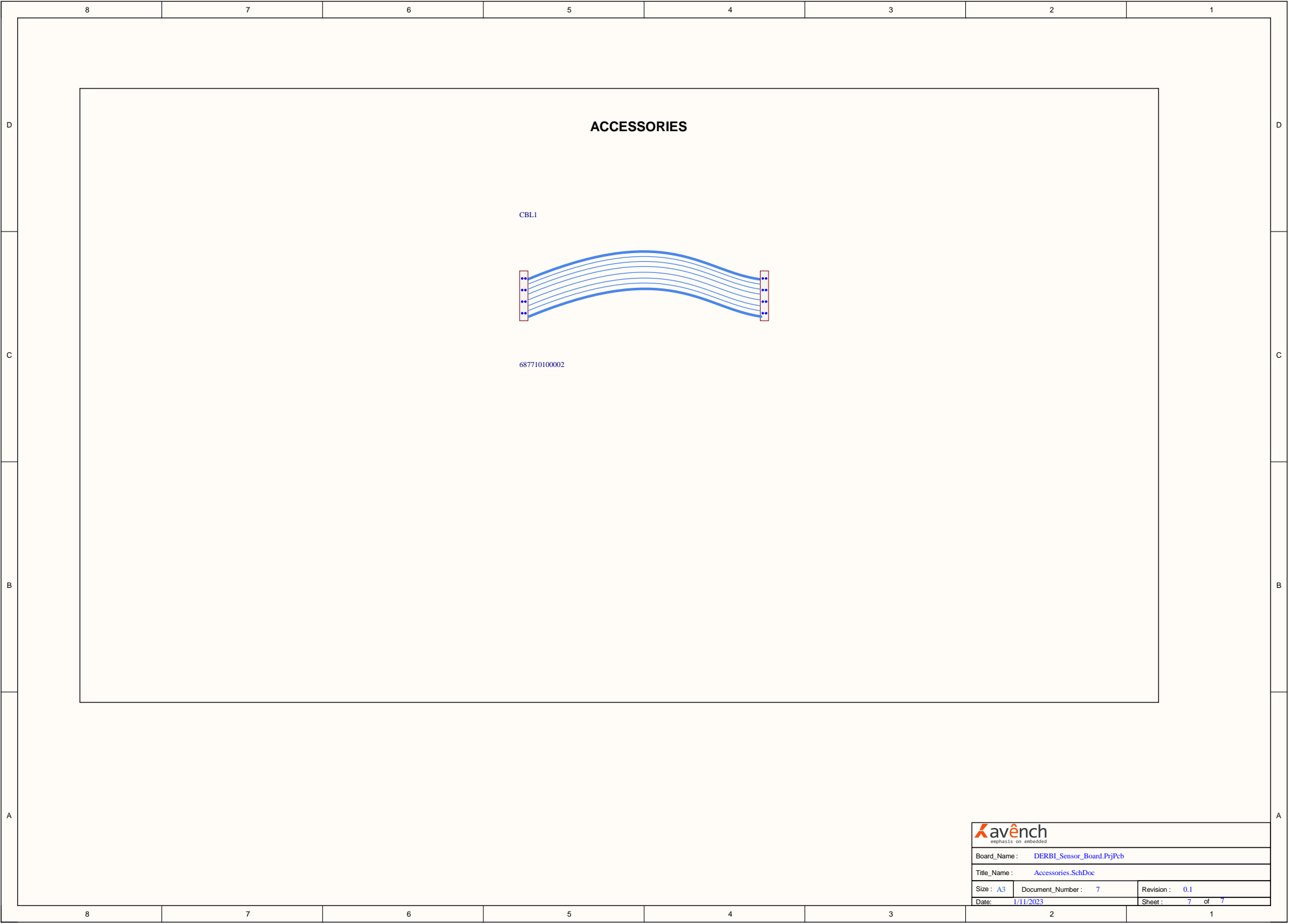
Size : A3

Document_Number : 6

Revision : 0.1

Date : 1/11/2023

Sheet : 6 of 7



Line #	Name	Description	Designator	Quantity	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
		0.1 μ F \pm 10% 16V Ceramic Capacitor XSR 0402 (1005 Metric)	C1	1							
	CAP_CER 4.7UF_2 5V_XSR_0 805	4.7 μ F \pm 10% 25V Ceramic Capacitor XSR 0805 (2012 Metric)	C2, C3	2							
		10 μ F Molded Tantalum Capacitors 16 V 0805 (2012 Metric) 40m @ 100kHz	C4	1							
		22 μ F Molded Tantalum Capacitors 16 V 1206 (3216 Metric) 30m @ 100kHz	C5, C6	2							
	CABLE_FF C_10POS _0.50MM _3.94"	10 Position FPC, FPC Cable 0.020" (0.50mm) 3.940" (100.08mm)	CBL1	1							
	CONN_FF C_VERT_ 10POS_0 50MM_5 MD	10 Position FPC, FPC Connector Contacts, Vertical - 1 Sided 0.020" (0.50mm) Surface Mount	J1	1							
	Mounting Hole_3M M		MH1, MH2, MH3, MH4	4							
	TRANS_P NP_50V_ 0.15A_SO T23-3	Bipolar (BIT) Transistor PNP 50 V 150 mA 80MHz 320 mW Surface Mount SOT-23 3	Q1	1							
	RES_10K_ OHM_1% _1/10W_ 0402	10 kOhms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	R1	1							
	RES_SMD _158K_O HM_1%_ _1/10W_0 402	158 kOhms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200 Thick Film	R2	1							
	RES_50K_ OHM_0.1 %, 1/10W _0603	50 kOhms \pm 0.1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Thin Film	R3	1							
	RES_SMD _2.2K_OH M_1%_ _1/10W_040 2	2.2 kOhms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200 Thick Film	R4	1							
	RES_SMD _150_OH M_1%_ _1/10W_040 2	150 Ohms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200 Thick Film	R5, R6	2							
	RES_0_O HM_JUM PER_1/10 W_0603	0 Ohms Jumper 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Moisture Resistant Thick Film	R7	1							
	LDO_CM OS_HICU RR_SO- 8EP_T&R _2.5K	Linear Voltage Regulator IC Positive Adjustable 1 Output 1A 8- SO-EP	U1	1							
	IC_INVER TER_6CH _1- INP_14SO IC	Inverter IC 6 Channel 14- SOIC	U2	1							
	CCD_LINE AR_IMAG E_SEN50 R_DIP22	Image Sensors CCD Linear Image Sensor B/W- 3648x1	U3	1							
	CCD_Ima ge_Senso r_5.5 μ m x 64 μ m_16- LCC	CCD Image Sensor 5.5 μ m x 64 μ m 16-LCC	U4	1							