

CUSTOMER	MIT
PROJECT	2022-0630 (CITYSCANNER-EVO-SENSOR)
REVISION	2
SCHEMATIC	20220630_CITYSCANNER-EVO-SENSOR_V2
DATA	23/05/2023
DRAFTED	M.
APPROVED	Nome Approved



Item	Quantity	Reference	Part	MPN	MPN2	Description	Temperature	Distributor	Type	Package	Database
1	1	CS1	CS V2 2L 35um			C.S. CS SENSOR V2 (115x52)mm HAL 2L/50/5R sp=1.6mm Cu=35um	TG140	WE-ONLINE			
2	36	C9,C10,C11,C15,C16,C17,C18,C19,C20,C27,C28,C99,C102,C103,C104,C105,C106,C108,C109,C110,C111,C112,C113,C114,C115,C116,C117,C123,C124,C125,C126,C128,C129,C130,C132,C133	100n50V			CHIP CAP.CER. 100nF 50V 10% X7R 0402	55..+125		SMD	CS-C-0402	
3	8	C21,C22,C23,C24,C25,C26,C107,C134	10u/10V-X5R			CHIP CAP.CER. 10uF 10V 10% X5R 0603		FAE	SMD	CS-C-0603	28168
4	4	C121,C122,C127,C131	1u/16V-X5R			CHIP CAP.CER. 1uF 16V 10% X5R 0402		FAE	SMD	CS-C-0402	37485
5	2	DZ3,DZ5	MMSZ5226BT1G	MMSZ5226BT1G		DIODO ZENER 0.5W 3.3V MMSZ5226BT1G ONSEMI SOD123 SMT		M-863-MMSZ5226BT1G	SMD	SOD123	
6	2	DZ4,DZ7	MMSZ5221BT1G	MMSZ5221BT1G		DIODO ZENER 0.5W 2.4V MMSZ5221BT1G ONSEMI SOD123 SMT	-55°C .. +150°C	M-863-MMSZ5221BT1G	SMD	SOD123	
7	2	F2,F3	OZCM0020FF2G	OZCM0020FF2G		FUSIBILE RIPRIST. 0.2A 9V 0603 OZCM0020FF2G BEL FUSE SMT	40°..+85°	FAE	SMD	FS-0603	40877
8	1	J7	878322014	878322014		HEADER 20P M DOPPIA FILA P=2.00 878322014 MOLEX SMD	-55..105	M-538-87832-2014	SMD	J-10X2-0200-MDS-878322014	
9	2	J9,J10	STRIP 8P - FDT			STRIP 1P F/D P=2.54 H=7 NERA 801-87-036-1001		FAE	THT	J-8-0254-FDT	1692
10	1	J11	BF100-10-A-D-1-0640-L-C	BF100-10-A-D-1-0640-L-C		CONN. F-C 10P F/D P=2 BF100-10-A-D-1-0640-L-C GCT SMT		D-2073-BF100-10-A-D-1-0640-L-CCT-ND	SMD	J-6X2-0200-FDS-BF100	
11	1	J12	SM06B-GHS-TB	SM06B-GHS-TB		CONN. GH 6P MIO P=1.25 GH JST SM06B-GHS-TB(LF)(SN)	-25°..+85°	D-455-1568-1-ND	SMD	J-6-0125-MOS-SM06B-GHS-TB	
12	1	J13	SSB-ZR-SMAA-TF	SSB-ZR-SMAA-TF		CONN. ZH 5P MIO P=1.5 ZH JST SSB-ZR-SMAA-TF	-25°..+85°	D-455-1696-1-ND	SMD	J-5-0150-MOS-SSB-ZR-SMAA	
13	5	L3,L5,L6,L7,L8	BLM21PG221SN1D	BLM21PG221SN1D		FILTRO 220R 2A 25% 0805 BLM21PG221SN1D MURATA SMT	-55°..+125°	FAE	SMD	LS-0805	20590
14	3	Q11,Q24,Q26	BSS84			TRANSISTOR MOSFET P BSS84.215 SOT-23 SMT	-55°..+150°	FAE	SMD	SOT23	28241
15	3	Q12,Q25,Q27	BC817-25			TRANSISTOR NPN BC817-25 SOT-23 SMT		FAE	SMD	SOT23	15414
16	1	Q28	BSS138			TRANSISTOR MOSFET N BSS138 SOT-23 SMT		FAE	SMD	SOT23	17269
17	29	R18,R19,R20,R21,R22,R23,R24,R25,R26,R27,R28,R29,R32,R36,R40,R41,R42,R43,R44,R45,R46,R47,R50,R96,R97,R101,R102,R226,R231	33R			CHIP RES. 33R 0402 1/16W 1% 100PPM/C		FAE	SMD	RS-0402	38764
18	2	R34,R48	0R			CHIP RES. 0R 0603 1/16W 1%	-55°..+150°	FAE	SMD	RS-0603	15541
19	5	R35,R61,R62,R249,R288	0R			CHIP RES. 0R 0402 1/16W 1%		FAE	SMD	RS-0402	25681
20	15	R37,R57,R232,R236,R239,R240,R241,R242,R244,R246,R270,R271,R276,R289,R290	100k			CHIP RES. 100K 0402 1/16W 1%		FAE	SMD	RS-0402	25127
21	4	R51,R234,R245,R282	1k			CHIP RES. 1K 0402 1/16W 1%	-55°..+155°	FAE	SMD	RS-0402	25126
22	6	R53,R54,R105,R225,R230,R280	100R			CHIP RES. 100R 0402 1/16W 1%		FAE	SMD	RS-0402	26315
23	22	R59,R60,R106,R233,R235,R237,R238,R247,R252,R253,R266,R267,R258,R263,R264,R265,R266,R272,R274,R278,R281,R284	10k			CHIP RES. 10K 0402 1/16W 1%	-55°..+125°	FAE	SMD	RS-0402	25129
24	6	R254,R255,R259,R260,R261,R262	5.1k			CHIP RES. 5K1 0402 1/16W 1%	-55°..+155°	FAE	SMD	RS-0402	48041
25	2	R267,R268	1M			CHIP RES. 1M 0402 1/16W 1%		FAE	SMD	RS-0402	32464
26	1	R269	390R			CHIP RES. 390R 0603 1/16W 1%		FAE	SMD	RS-0603	20433
27	2	R273,R275	120k	RC0402FR-07120KL		CHIP RES. 120k 0402 1/16W 1% 100PPM/C			SMD	RS-0402	
28	1	R283	2.2k			CHIP RES. 2K2 0402 1/16W 1%		FAE	SMD	RS-0402	35095
29	2	TVS7,TVS11	D3V3F8U9LP3810-7			INTEGRATO SIGNAL PROTECTION D3V3F8U9LP3810-7 DIODES UDFN3810-9 SMT	-55°..+85°	M-621-D3V3F8U9LP3810-7	SMD	UDFN3810-9	
30	13	TVS8,TVS9,TVS10,TVS13,TVS14,TVS15,TVS16,TVS17,TVS18,TVS19,TVS20,TVS21,TVS22	NSPU3051N2T5G			DIODO TVS TRANSIL UNIDIR. 5.5V NSPU3051N2T5G X2DFN SMT	-65°..+150°	D-NSPU3051N2T5GOSC T-ND	SMD	D-XDFN2	
31	2	U1,U3	TXS0104ERGYR	TXS0104ERGYR		INTEGRATO TXS0104ERGYR TEXAS VQFN14 SMT	40°C..85°C	FAE	SMD	VFQFN14-EXP-0350X0350	41323
32	1	U2	TXS0108ERGYR	TXS0108ERGYR		INTEGRATO TXS0108ERGYR TI VQFN20 SMT	40°..85°	D-296-24806-1-ND	SMD	VFQFN20-EXP-0350X0450	
33	1	U15	74LV4066PW	74LV4066PW		INTEGRATO SWITCH 74LV4066PW NXP TSSOP14 SMT	40°C..125°C	M-771-LV4066PW118	SMD	TSSOP14	
34	1	U16	BME280	BME280		INTEGRATO BME280 BOSCH LGA8 SMT	40°..+85°	FAE	SMD	IC-BME280	38357
35	1	U17	ADS7828E	ADS7828E	AD57828EB	INTEGRATO ADC/DAC ADS7828E TEXAS TSSOP16 SMT	40°..+85°	FAE	SMD	TSSOP16	26248
36	1	U18	CMM-2718AT-42316-TR	CMM-2718AT-42316-TR		MICROPHONE MEMS CUI DEVICES SMT	40°..+100°	M-490-CMM2718AT42316TR	SMD	Iga4-0275x0185	
37	1	U19	LTC1966IMS8	LTC1966IMS8#PBF		INTEGRATO RMS-TO-DC LTC1966 LINEAR MSOP8 SMT	40°..+85°	M-584-LTC1966IMS8#PBF	SMD	MSOP8	
38	2	U20,U21	MCP6022-I/SN	MCP6022-I/SN		INTEGRATO SIGNAL AMPLIFIER MCP6022-I/SN MICROCHIP SOIC-8 SMT	40°..+85°	M-579-MCP6022-I/SN	SMD	SOIC8	
39	1	U22	MAX5805BAUB+ T	MAX5805BAUB+ T		INTEGRATO DAC MAX5805BAUB+ MAXIM MSOP10 SMT	40°..+125°	M-700-MAX5805BAUB+T	SMD	MSOP10	

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MECHANICAL

1	1	ASS1	SEN55-SDN-T	SEN55-SDN-T		SENSORE PM SEN55-SDN-T SENSIRION	-10°..50°	M-403-SEN55-SDN-T	THT		
2	1	ASS2	810-0021-01	810-0021-01		SENSORE NO2/O3/NO 810-0021-01 ALPHASENSE	-10°..50°		THT		
	2							2			

NOT MOUNTED

1	1	ASS3	NU	SP530		SENSORE PM SP530 SENSIRION	-10°..60°	M-403-SP530	THT		
2	1	C14	NU			CHIP CAP.CER. 1nF 50V 10% X7R 0402		FAE	SMD	CS-C-0402	33357
3	2	C100,C101	NU			CHIP CAP.CER. 100nF 50V 10% X7R 0402	-55..+125		SMD	CS-C-0402	
4	2	D55,D56	NU	SS14		DIODO SCHOTTKY 1A 40V SS14 SMA SMT		FAE	SMD	SMA	16655
5	3	FID1,FID2,FID3	TPS			FIDUCIAL		FAE	SMD	FIDUCIAL	
6	2	R33,R49	NU			CHIP RES. 0R 0603 1/16W 1%	-55°..+150°	FAE	SMD	RS-0603	15541
7	5	R38,R228,R243,R286,R287	NU			CHIP RES. 0R 0402 1/16W 1%		FAE	SMD	RS-0402	25681
8	1	R39	NU			CHIP RES. 33R 0402 1/16W 1% 100PPM/C		FAE	SMD	RS-0402	38764
9	5	R248,R250,R251,R277,R285	NU			CHIP RES. 10K 0402 1/16W 1%	-55°..+125°	FAE	SMD	RS-0402	25129