

Bill of Materials

TI DESIGNS

TIEP-0038 - Vision Analytics Industrial I/O Board

Quantity	Designator	Type	LibRef	Footprint	Comment	Value	Voltage	Description	Mfg	Mfg PN
3	C300, C400, C403	capacitor	B45196H2156K209	SMD TAN B	15uF	15uF	10V	CAP TANT 15UF 10V 10% 1411	Kemet	T491B156K010AT
4	R209, R210, R211, R212	resistor	RES 0603	R0603L	49.9	49.9		RES 49.9 OHM 1/10W 1% 0603 SMD	Vishay Dale	CRCW060349R9FKEA
1	B100	general	BR1225-1VC	BR1225-1VC	BR1225-1VC			BATTERY LITH 12.5MM COIN PC PIN5	Panasonic - BSG	BR-1225/VCN
2	R804, R810	resistor	RES 1206	R1206N	270	270		RES 270 OHM 1/4W 1% 1206 SMD	Vishay Dale	CRCW1206270R9FKEA
1	C613	general	CB3LV-3I-24M5760	CB3LV	CB3LV-3I-24M5760			OSC 24.5760 MHZ 3.3V SMD	CTS-Frequency Controls	CB3LV-3I-24M5760
1	Q500, Q501, Q502	capacitor	CAP X7R 0603 16V	C0603N	0.22uF	0.22uF	16V	CAP CER .22UF 16V X7R 0603	Murata Electronics North America	GRM188R71C224KA01D
4	Q503	general	MMBT2222A	SOT-23-3	MMBT2222A			TRANSISTOR GP NPN AMP SOT-23	Fairchild Semiconductor	MMBT2222A
1	JP504	general	JUMPER HEADER	JUMPER	JUMPER			CONN HEADER 2POS 100 VERT GOLD	Molex Connector Corporation	22-28-4024
3	D600, D601, D602	general	B340A-13-F	SMA	B340A-13-F			DIODE SCHOTTKY 3A 40V SMA	Diodes Inc	B340A-13-F
3	U600, U601, U602	general	TP55430	S08(PWP)	TP55430			IC BUCK ADJ 3A 850	Texas Instruments	TP55430DDA
1	TP1	general	TP_BLK_5001	TP	5001			TEST POINT PC MINI .040"D BLACK	Keystone Electronics	5001
1	JI04	general	87832-2420	87832-2420	87832-2420			CONN HEADER 24POS 2MM VERT SMD	Molex Connector Corporation	87832-2420
2	R222, R225	resistor	RES 0402	R0402L	130	130		RES 130 OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW0402130R9FKE0
4	R301, R306, R310, R302, R303, R305, R309, R312	resistor	RES 0402	R0402L	1.80k	1.80k		RES 1.80K OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW0402180R9FKE0
7	R200, R201, R206, R213, R221, R223, R224	resistor	RES 0402	R0402L	2.20k	2.20k		RES 2.20K OHM 1/16W 1% 0402 SMD	Vishay	CRCW040222K20FKE0
1	R601	resistor	RES 0402	R0402L	3.24k	3.24k		RES 3.24K OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW040232K24FKE0
4	R301, R307, R308, R314	resistor	RES 0402	R0402L	3.30k	3.30k		RES 3.30K OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW040233K30FKE0
1	R214	resistor	RES 0402	R0402L	4.99K	4.99K		RES 4.99K OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW04024K99FKE0
1	R603	resistor	RES 0402	R0402L	5.90K	5.90K		RES 5.90K OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW04025K90FKE0
1	R606	resistor	RES 0402	R0402L	15.8K	15.8K		RES 15.8K OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW040215K8FKE0
1	R605	resistor	RES 0402	R0402L	20.0K	20.0K		RES 20.0K OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW040220K0FKE0
1	R607	resistor	RES 0402	R0402L	140K	140K		RES 140K OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW0402140KFKE0
1	R604	resistor	RES 0402	R0402L	348K	348K		RES 348K OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW0402348KFKE0
2	C907, C908	capacitor	CAP NPO 0402 50V	C0402L	12pF	12pF	50V	CAP CER 12PF 50V NPO 0402	AVX Corporation	0402SAL120A7A
1	Y200	general	ECS-250-18-5PX-F-TR	CSM-7	25.000 MHZ			CRYSTAL 25.000MHZ 18PF SMD	ECS Inc	ECS-250-18-5PX-F-TR
1	JI03	general	67913-0002	67913-0002	1775059-1			CONN SD MEMORY SMD BOTTOM MNT	TE Connectivity	1775059-1
3	I700, I701, I702	general	79109-1224	79109-1224	79109-1224			CONN 50POS 2MM SOCKET STR PC SMD	3M	150250-2000-RB
6	C601, C602, C605, C606, C800, C805	capacitor	CAP X5R 1206X07 50V	CAPC3216X18N	4.7uF	4.7uF	50V	CAP CER 4.7UF 50V X5R 1206	Taiyo Yuden	UMK316B4H75KL-T
1	D603	general	MBR160T3G	403D-02-SMA	MBR160T3G			DIODE SCHOTTKY 60V 1A SMA	On Semiconductor	MBR160T3G
1	JI00	general	SI-3523-SMT	SI-3523-SMT	SI-3523-SMT			CONN AUDIO JACK 3.5MM STEREO SMD	CLIF Inc	SI-3523-SMT-TR
2	S100, S101	general	KMR221GLFS	KMR221GLFS	KMR221GLFS			SWITCH TACTILE SPST-NO 0.05A 32V	C&K Components	KMR221GLFS
1	JI03	general	67491-1032	67491-1032	67491-1032			CONN HEADER SATA 7POS PCB GOLD	Molex Connector Corporation	67491-1032
1	JA00	general	74320-4004	74320-4004	74320-4004			CONN RECEPT RT ANG DIGITAL DVI	Molex Connector Corporation	74320-4004
2	C111, C112	capacitor	CAP X5R 1206X07 6.3V	CAPC3216X18N	100uF	100uF	6.3V	CAP CER 100UF 6.3V 20% X5R 1206	Murata Electronics North America	GRM31CR60J107ME39L
1	U300	general	DS0D1791D8	D828	DS0D1791D8			IC 34BIT STEREO AUD DAC 28-SSOP	Texas Instruments	DS0D1791D8
1	Q600	general	F2S66812	SO-8	F2S66812			MCSPET P-CM 30V 20A SO-8	Fairchild Semiconductor	F2S66812
1	U900	general	MCP2515ST	TSSOP20	MCP2515-ST			IC CAN CONTROLLER W/SR 20TSSOP	Microchip Technology	MCP2515-ST
3	L300, L400, L401	general	MM21608R301A	L0603	MM21608R301A			FERRITE CHIP 300 OHM 500MA 0603	TDK Corporation	MM21608R301A
1	U301	general	OPA2134UA	SO-8	OPA2134UA			IC OPAMP AUDIO STER AR 8SOIC	Texas Instruments	OPA2134UA
1	U400	general	TFP410PAP	PAP64 N	TFP410PAP			IC TRANSMITTER DIGITAL 64-HTQFP	Texas Instruments	TFP410PAP
1	U200	general	TLK100PH	PHP48 N	TLK100PH			IC TXRX IND ETHERNET 48HTQFP	Texas Instruments	TLK100PH
2	U100, U101	general	TPS2041BDBVR	SOT-23-5	TPS2041BDBVR			IC PWR DIST SWITCH SNGL SOT23-5	Texas Instruments	TPS2041BDBVR
1	U502	general	TRS232ECPWR	TSSOP16	TRS232ECPWR			IC RS232 LINE DVR/RCVR 16-TSSOP	Texas Instruments	TRS232ECPWR
1	C307	capacitor	TCPIA105M8R	CAPC2012X12N	1.0uF	1.0uF	10V	CAP TANT 1.0UF 10V 20% SMD	Rohm Semiconductor	TCPIA105M8R
1	Y900	general	ABL5-20.000MHZ-L4Q-T	CSM-7	20.000MHz			CRYSTAL 20MHZ 18PF SMD	Abracon Corporation	ABL5-20.000MHZ-L4Q-T
1	U501	general	ISO1050DUBR	DUB08	ISO1050DUBR			IC TXRX CAN 5V 8SOP	Texas Instruments	ISO1050DUBR
3	C611, C612, C615	capacitor	CAP X5R 1210X11 25V	CAPC3225X27N	22uF	22uF	25V	CAP CER 22UF 25V X5R 1210	Taiyo Yuden	TMK325B1226MM-T
2	C603, C607	capacitor	593D107X0010D2TE3	SMD TAN D	100uF	100uF	10V	CAP TANT 100UF 10V 20% 2917	Vishay Sprague	593D107X0010D2TE3
35	C105, C106, C107, C108, C109, C110, C113, C117, C119, C120, C200, C203, C204, C205, C206, C207, C208, C209, C210, C211, C212, C213, C214, C215, C216, C217, C301, C304, C305, C306, C307, C311, C312,	capacitor	CAP X7R 0402 16V	C0402L	0.1uF	0.1uF	16V	CAP CER 0.1UF 16V 10% X7R 0402	TDK Corporation	C1005X7R1C104K050B
1	JI01, J502, J504	general	5103308-1	5103308-1	IDC_D89			CONN HEADER LOPRO STR 10POS GOLD	TE Connectivity	5103308-1
1	JI00	general	UX60-MB-558	UX60-MB-558	UX60-MB-558			CONN RECEPT MINI USB2.0 5POS	Hirose Electric Co Ltd	UX60-MB-558
1	J200	general	JX0011D21BNL	JX0011	JX0011D21BNL			RJ-45 Jack with internal transformer and LED	Pulse	JX0011D21BNL
1	C610	capacitor	CAP X7R 0805X05 50V	CAPC2012X14N	1.0uF	1.0uF	50V	CAP CER 1UF 50V X7R 0805	Murata Electronics North America	GRM21BR71H105KA12L
1	R601, F602, F603, F604	general	1711026	1711026	1711026			CONN TERM BLOCK 2POS 5MM PCB	Phoenix Contact	1711026
4	R604	general	MF-MSMF110-24	F1812N	MF-MSMF110/24X-2	1.1A	24V	FUSE PTC RESET 1.10A SMD 1812	Bourns Inc	MF-MSMF110/24X-2
2	U102, U103	general	USBLC6-2P6	SOT-666	USBLC6-2P6			IC ESD PROTECTION FOR HS SOT-666	STMicroelectronics	USBLC6-2P6
1	RV600	general	VC15MA0160KBA	2220	VC15MA0160KBA			VARISTOR TVS ESD 16VDC1200A 2220	AVX Corporation	VC15MA0160KBA
1	R208	resistor	RES 0402	R0402L	0.0	0.0		RES 0.0 OHM 1/16W 0402 SMD	Vishay	CRCW04020000Z0ED
13	R509	resistor	RES 0402	R0402L	1.00K	1.00K		RES 1.00K OHM 1/16W 1% 0402 SMD	Vishay	CRCW04021K00FKE0
2	R600, R602	resistor	RES 0402	R0402L	10.0k	10.0k		RES 10.0K OHM 1/16W 1% 0402 SMD	Vishay	CRCW040210K0FKE0
2	R304, R311	resistor	RES 0402	R0402L	100	100		RES 100 OHM 1/16W 1% 0402 SMD	Vishay	CRCW0402100R9FKE0
2	C201, C202	capacitor	CAP NPO 0402 50V	C0402L	33pF	33pF	50V	CAP CER 33PF 50V 5% NPO 0402	TDK Corporation	C1005C0G1H330J050BA
4	C308, C311, C312, R217, R218, R219, R220, R226, R227, R228, R229	capacitor	CAP X7R 0402 50V	C0402L	560pF	560pF	50V	CAP 560PF 50V CERAMIC X7R 0402	Kemet	C0402C561S5RACU
11	JI01	general	MitoyOMAP Interface	10033853-15ZPSLF	MitoyOMAP Interface			RES 33.0 OHM 1/16W 1% 0402 SMD	Vishay	CRCW040233R0FKE0
1	JI02	general	USB-A-S-R-TSMT	USB-A-S-R-TSMT	USB-A-S-R-TSMT			CONN SODIMM DDR2 200POS R/A SMD	FCI	10033853-05ZPSLF
2	U800, U801	general	VBLSD1-S12-SS-SIP	VBLSD1	VBLSD1-S12-SS-SIP			CONN RCPT USB RT ANG SMD	Multicomp	USB-A-S-R-TSMT
1	R409	resistor	RES 0402	R0402N	1.00k	1.00k		CONVERTER DC/DC 5V REG 0.75W	CLIF Inc	VBLSD1-S12-SS-SIP
3	L600, L601, L602	general	IHLP2525X33-1	IHLP2525X30	IHLP2525X33-1	22uH		RES 1.00K OHM 1/16W 1% 0402 SMD	Vishay Dale	CRCW04021K00FKE0
3	C310, C401, C404, C406, C407, C408, C409, C410, C411, C502, C503, C508	capacitor	CAP X7R 0603 50V	C0603N	0.1uF	0.1uF	50V	INDUCTOR POWER 22UH 2.9A SMD	Vishay Dale	IHLP2525X33-1
1	R500	resistor	RES 0603	R0603N	10.0k	10.0k		CAP CER 0.1UF 50V 10% X7R 0603	AVX Corporation	06035C104KA7A
3	C600, C604, C609	capacitor	CAP X7R 0603 50V	C0603N	0.01uF	0.01uF	50V	RES 10.0K OHM 1/10W 1% 0603 SMD	Yageo	RC0603FR-0710K
								CAP CER 1000PF 50V 10% X7R 0603	Murata Electronics North America	GRM188R71H103KA01D

	C302, C402, C405, C505, C506, C507, C508, C614, C901									
9		capacitor	CAP X7R 0603 25V	C0603N	1.0uF	1.0uF	25V	CAP CER 1uF 25V 10% X7R 0603	TDK Corporation	CGA3E1X7R1E105K080AC
1	U505	general	SM712TCT	SOT-23-3	SM712.TCT			IC TVS ASYMM RS-485V 7/12V SOT23	Semtech	SM712.TCT
1	R502	resistor	RES 1206	R1206N	120	120		RES 120 OHM 1/4W 1% 1206 SMD	Yageo	RC1206FR-07120RL
3	R400, R401, R402	resistor	RES 0603	R0603N	510	510		RES 510 OHM 1/10W 1% 0603 SMD	Vishay Dale	CRCW0603510RKEA
2	C309, C313	capacitor	CAP X7R 0402 50V	C0402N	1800pF	1800pF	50V	CAP CER 1800PF 50V 10% X7R 0402	Murata Electronics North America	GBM155R71H182KA01D
1	Q100	general	2N7002ET1G	SOT-23-3	2N7002ET1G			MOSFET N-CH 60V 260MA SOT-23	On Semiconductor	2N7002ET1G
1	U12	general	TLV8035DBZR	SOT-23-3	TLV8035DBZR			IC VOLT SUPERVISR 2.93V SOT23-3	Texas Instruments	TLV8035DBZR
1	PN-PCB1	general	PN-PCB		90-000107R-4_RevA	90-000107R-4_RevA		PCB - MityOMAP Industrial IO	Critical Link LLC	90-000107R-4