



NATIONAL OPTICAL
ASTRONOMY
OBSERVATORY

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MONSOON
Bill of Materials
IR Acquisition Mother Board
SN001 - SN009 NEWFIRM

Dwg No.: MNSN-EL-04-4004-001 Rev: A1
Next Assembly: MNSN-EL-10-0100-001

LTR	DESCRIPTION	ECR	DATE	BY	APPRVD
-A1	changed the format from that given to the manufacturer make BOM NEWFIRM specific			dms	

ITEM	QTY	TBD des	REFDES	VALUE	P/N	MFR	P/N DIGIKEY	DESCRIPTION
1	1	OPEN	R327		NOT INSTALLED			0805
2	1	OPEN	R328		NOT INSTALLED			0805
3	1	OPEN	R335		NOT INSTALLED			0805
4	1	OPEN	R336		NOT INSTALLED			0805
5	1	OPEN	R391		NOT INSTALLED			0805
6	1	OPEN	R393		NOT INSTALLED			0805
7	1	OPEN	R394		NOT INSTALLED			0805
8	1	OPEN	R411		NOT INSTALLED			0805
9	18	TBD_P	U21, U24, U26, U28, U33, U34, U35, U36, U41, U42, U43, U44, U49, U50, U78, U79,		OPA627AU	Tl / Burr Brown		IC, Precision high speed difet op amp
10	18	TBD_S	U22, U23, U25, U27, U29, U30, U31, U32, U37, U38, U39, U40, U45, U46, U47, U48,		NOT INSTALLED			SO8
11	18	TBD1	R23, R35, R55, R71, R89, R92, R113, R115, R153, R156, R177, R179, R217, R220, R241, R243, R323, R330	200	P0603E2000BB_	Vishay		Resistor, 200 ohms 0.1% 1/8W +-25ppm 0603
12	18	TBD2	R26, R47, R67, R83, R130, R134, R142, R145, R194, R198, R206, R209, R258, R262, R270, R273, R362, R365	10M	9C06031A1005FKHFT	Yageo	311-10.0MHTR-ND	Resistor, 10M 1% 1/16W +-100ppm 0603
13	18	TBD3	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R52, R345	200	P0603E2000BB_	Vishay		Resistor, 200 ohms 0.1% 1/8W +-25ppm 0603
14	18	TBD4	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C152, C153		NOT INSTALLED			
15	18	TBD5	R31, R43, R63, R79, R110, R111, R127, R128, R174, R175, R191, R192, R238, R239, R255, R256, R353, R354	1.00K	P0603Y1001BB_	Vishay		Resistor, 1.0K 0.1% 1/8W +-25ppm 0603
16	18	TBD6	C20, C28, C33, C38, C53, C54, C62, C63, C77, C78, C83, C84, C101, C102, C110, C111, C150, C151	330pF	ECJ-1VC1H331J	Panasonic	PCC331ACVTR-ND	Cap, Cerc 330pF 50V 5% NPO 0603
17	18	TBD7	R277, R278, R279, R280, R281, R282, R283, R284, R285, R286, R287, R288, R289, R290, R291, R292, R359, R367		NOT INSTALLED			0603
18	18	TBD8A	C21, C27, C32, C37, C50, C51, C52, C61, C74, C75, C76, C82, C98, C99, C100, C109, C132, C149		NOT INSTALLED			06033
19	18	TBD8B	C113, C114, C115, C116, C117, C118, C119, C120, C121, C122, C123, C124, C125, C126, C127, C128, C160, C161		NOT INSTALLED			0603
20	18	TBD9	R30, R38, R58, R74, R99, R101, R103, R104, R163, R165, R167, R168, R227, R229, R231, R232, R334, R341		NOT INSTALLED			0603
21	18	TBD10	R27, R46, R66, R82, R129, R133, R141, R144, R193, R197, R205, R208, R257, R261, R269, R272, R361, R364	2.2uF	ECJ-2FB1E225K	Panasonic	PCC2320TR-ND	Cap, Cerc 0805 2.2uF 25V 10% X5R

ITEM	QTY	TBD des	REFDES	VALUE	P/N	MFR	P/N DIGIKEY	DESCRIPTION
22	18	TBD11	R25, R33, R49, R69, R87, R90, R112, R114, R151, R154, R176, R178, R215, R218, R240, R242, R300, R324	10	9C06031A10R0FKHFT	Yageo	311-10.0HTR-ND	Resistor, 10 ohm 1% 1/16W +-100ppm 0603
23	18	TBD12	C17, C29, C34, C39, C41, C42, C43, C58, C65, C66, C67, C79, C89, C90, C91, C106, C129, C155		NOT INSTALLED			0603
24	18	TBD13	C18, C30, C35, C40, C48, C49, C59, C60, C72, C73, C80, C81, C96, C97, C107, C108, C156, C157		NOT INSTALLED			0603
25	18	TBD14	R28, R37, R57, R73, R97, R98, R120, R121, R161, R162, R184, R185, R225, R226, R248, R249, R332, R333	0	9C06031A0R00JLHFT	Yageo	311-0.0GTR-ND	Resistor, 0 ohm 1/10W 5% 0603
26	18	TBD15	R29, R41, R61, R77, R100, R102, R122, R123, R164, R166, R186, R187, R228, R230, R250, R251, R349, R350	4.02K	P0603Y4021BB_	Vishay		Resistor, 4.02K 0.1% 1/8W +-25ppm 0603
27	18	TBD16	R32, R45, R65, R81, R139, R140, R147, R148, R203, R204, R211, R212, R267, R268, R275, R276, R358, R360		NOT INSTALLED			0603
28	18	TBD17	C1001, C1002, C1003, C1004, C1005, C1006, C1007, C1008, C1009, C1010, C1011, C1012, C1013, C1014, C1015, C1016, C1017, C1018	0	9C06031A0R00JLHFT	Yageo	311-0.0GTR-ND	Resistor, 0 ohm 1/10W 5% 0603
29	18	TBD18	R24, R34, R50, R70, R85, R86, R88, R91, R149, R150, R152, R155, R213, R214, R216, R219, R306, R329		NOT INSTALLED			0603
30	18	TBD19A	C19, C26, C31, C36, C44, C45, C46, C47, C68, C69, C70, C71, C92, C93, C94, C95, C130, C131		NOT INSTALLED			0603
31	18	TBD19B	C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C159, C162		NOT INSTALLED			0603
32	18	TBD20	R21, R44, R64, R80, R131, R135, R137, R138, R195, R199, R201, R202, R259, R263, R265, R266, R356, R357		NOT INSTALLED			0603
33	18	TBD21	R22, R48, R68, R84, R132, R136, R143, R146, R196, R200, R207, R210, R260, R264, R271, R274, R363, R366		NOT INSTALLED			0603
34	18	TBD22A	R553, R558, R563, R568, R573, R578, R597, R598, R599, R605, R607, R608, R609, R620, R635, R636, R645, R646	20.5K	P0805E2052BB_	Vishay		Resistor, 20.5K 0.1% 1/8 W +-25ppm 0805

ITEM	QTY	TBD des	REFDES	VALUE	P/N	MFR	P/N DIGIKEY	DESCRIPTION
35	6	TBD22B	R583, R588, R627, R629, R630, R631	6.04K	P0805E6041BB_	Vishay		Resistor, 6.04K 0.1% 1/8W +-25ppm 0805
36	18	TBD23A	R554, R559, R564, R569, R574, R579, R612, R613, R614, R615, R616, R617, R618, R619, R628, R632, R633, R634	6.81K	P0805E6811BB_	Vishay		Resistor, 6.81K 0.1% 1/8W +-25ppm 0805
37	6	TBD23B	R584, R589, R623, R624, R625, R626	30.1K	P0805E3012BB_	Vishay		Resistor, 30.1K 0.1% 1/8W +-25ppm 0805
38	18	TBD24	R551, R556, R561, R566, R571, R576, R592, R594, R596, R601, R602, R604, R610, R621, R638, R640, R642, R643	5.11K	P0805E5111BB_	Vishay		Resistor, 5.11K 0.1% 1/8W +-25ppm 0805
39	6	TBD24S	R581, R586, R647, R648, R650, R654	5.11K	P0805E5111BB_	Vishay		Resistor, 5.11K 0.1% 1/8W +-25ppm 0805
40	18	TBD25	R552, R557, R562, R567, R572, R577, R591, R593, R595, R600, R603, R606, R611, R622, R637, R639, R641, R644	5.11K	P0805E5111BB_	Vishay		Resistor, 5.11K 0.1% 1/8W +-25ppm 0805
41	6	TBD25S	R582, R587, R649, R651, R652, R653	5.11K	P0805E5111BB_	Vishay		Resistor, 5.11K 0.1% 1/8W +-25ppm 0805
42	18	TBD26	C570, C576, C582, C588, C594, C600, C606, C612, C649, C656, C663, C664, C671, C673, C675, C677, C705, C711	1.0uF	ECJ-3YB1E105K	Panasonic	PCC1893TR-ND	Cap, Cerc 1206 1.0uF 25V +10% X7R
43	6	TBD26S	C719, C725, C732, C734, C738, C747	1.0uF	ECJ-3YB1E105K	Panasonic	PCC1893TR-ND	Cap, Cerc 1206 1.0uF 25V +10% X7R
44	2	TBD_OV	U58, U60		AD8021AR	Analog Devices		IC, Low Noise high-speed amplifier
45	2	TBD_VR	U61, U62		AD797AR	Analog Devices		IC, Ultralow distortion & noise Op Amp
46	2	TBDO1	C515, C518	4.7uF	ECJ-3YB1E475M	Panasonic	PCC2241CT-ND	Cap, Cerc 1206 4.7uF 25V +20% X5R
47	2	TBDO2	R338, R551	100	P0603E1000BB	Vishay		Resistor, 100 0.1% 1/8W +-25ppm 0603
48	2	TBDO3	R339, R355		NOT INSTALLED			0805
49	2	TBDO4	R337, R368	100	P0805E1000BB	Vishay		Resistor, 100 0.1% 1/8W +-25ppm 0805
50	2	TBDO5	C511, C519		NOT INSTALLED			0805
51	2	TBDO6	C513, C517		NOT INSTALLED			0805
52	18	TBDQ	Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q19, Q20		NOT INSTALLED			SOT23
53	2	TBDR1	C525, C532	4.7uF	ECJ-3YB1E475M	Panasonic	PCC2241CT-ND	Cap, Cerc 1206 4.7uF 25V +20% X5R
54	2	TBDR2	R369, R373	1.00K	P0603Y1001BB_	Vishay		Resistor, 1.0K 0.1% 1/8W +-25ppm 0603
55	2	TBDR3	R371, R374		NOT INSTALLED			0805
56	2	TBDR4	R372, R375	100	P0805E1000BB	Vishay		Resistor, 100 0.1% 1/8W +-25ppm 0805
57	2	TBDR5	C526, C533		NOT INSTALLED			0805
58	2	TBDR6	C524, C531		NOT INSTALLED			0805
59	2	TBDR7	R51, R53	49.9	ERJ-3EKF49R9V	Panasonic - ECG	P49.9HCT-ND	Resistor, 49.9 1/16 W 1% 0603 SMD
60	18	TBDS1	R17, R40, R60, R76, R94, R95, R118, R119, R158, R159, R182, R183, R222, R223, R246, R247, R347, R348		NOT INSTALLED			0603
61	18	TBDS2	C202, C238, C246, C254, C277, C283, C306, C308, C317, C323, C340, C342, C389, C395, C633, C635, C698, C700		NOT INSTALLED			CT3216
62	18	TBDS3	C203, C233, C241, C249, C275, C287, C293, C303, C315, C327, C333, C337, C387, C399, C425, C565, C566, C630		NOT INSTALLED			0603

ITEM	QTY	TBD des	REFDES	VALUE	P/N	MFR	P/N DIGIKEY	DESCRIPTION
63	18	TBDS4	R293, R294, R295, R296, R297, R298, R299, R370, R376, R382, R388, R395, R396, R397, R398, R399, R401, R402		NOT INSTALLED			0603
64	18	TBDS5	C201, C232, C240, C248, C272, C280, C286, C292, C312, C320, C326, C332, C384, C392, C398, C424, C559, C560		NOT INSTALLED			0603
65	18	TBDS6	C200, C237, C245, C253, C273, C281, C305, C307, C313, C321, C339, C341, C385, C393, C632, C634, C697, C699		NOT INSTALLED			CT3216
66	18	TBDS7	R18, R36, R56, R72, R93, R96, R116, R117, R157, R160, R180, R181, R221, R224, R244, R245, R331, R346		NOT INSTALLED			0603

ITEM	Total	REFDES	Value	Part Number	MFR	PN Digikey	Description
1	1			MON.3000.0003 REV A	NOAO		PCB BLANK, IR ACQ MOTHER BOARD
2	2	F1, F2		miniSMDC050	Raychem / Tyco Electronics	MINISMDC050CT-ND	Fuse, reset able 15V max 8A trip 0.5A IH
3	4	L1, L2, L3, L4		Wire short 18-20 awg			18-20 awg Wire short across pads of component
4	36	C205, C207, C234, C239, C242, C247, C250, C255, C276, C279, C285, C288, C291, C294, C304, C309, C316, C319, C325, C328, C331, C334, C338, C343, C388, C391, C397, C400, C426, C553, C554, C621, C631, C636, C692, C701	0.01uF	ECJ-1VB1H103K	Panasonic	PCC1784CT-ND	Cap, Cerc 0603 0.01uF 50V 10% X7R
5	54	C209, C211, C213, C215, C217, C218, C221, C223, C224, C227, C229, C230, C262, C263, C264, C265, C266, C267, C270, C271, C297, C298, C299, C310, C350, C351, C352, C353, C354, C355, C358, C359, C360, C361, C362, C366, C374, C375, C376, C377, C378, C379, C382, C383, C418, C419, C420, C422, C624, C625, C626, C637, C695, C702	0.1uF	ECJ-1VB1C104K	Panasonic	PCC1762CT-ND	Cap, Cerc 0603 0.1uF 16V 10% X7R
6	48	C572, C575, C578, C579, C584, C587, C590, C593, C596, C599, C602, C605, C608, C611, C614, C617, C646, C647, C648, C650, C652, C654, C657, C659, C668, C669, C672, C676, C685, C687, C689, C691, C704, C707, C714, C715, C716, C718, C722, C724, C728, C729, C731, C736, C745, C746, C748, C751	0.01uF	ECJ-2VB1H103K	Panasonic	PCC103BCT-ND	Cap, Cerc 0805 0.01uF 50V 10% X7R
7	103	C402, C403, C404, C405, C406, C407, C408, C409, C410, C411, C412, C413, C414, C429, C430, C431, C432, C433, C434, C435, C436, C437, C438, C439, C440, C441, C442, C443, C444, C445, C446, C447, C448, C449, C450, C451, C452, C453, C454, C455, C456, C457, C458, C459, C460, C461, C462, C463, C464, C465, C466, C467, C468, C469, C470, C471, C472, C473, C474, C475, C476, C477, C478, C479, C480, C481, C482, C483, C484, C485, C486, C487, C489, C492, C495, C497, C499, C501, C505, C508, C510, C512, C514, C520, C521, C522, C527, C528, C529, C534, C535, C536, C538, C539, C540, C541, C542, C543, C544, C545, C620, C643, C163, C164, C165, C166, C167, C168, C169, C170, C171, C172, C173, C174, C175, C176, C177, C178, C179, C180, C181, C182, C183, C184, C185, C186, C187, C506, C618, C641	0.1uF	ECJ-2YB1H104K	Panasonic	PCC1840CT-ND	Cap, Cerc 0805 0.1uF 50V 10% X7R

ITEM	Total	REFDES	Value	Part Number	MFR	PN Digikey	Description
8	28	C163, C164, C165, C166, C167, C168, C169, C170, C171, C172, C173, C174, C175, C176, C177, C178, C179, C180, C181, C182, C183, C184, C185, C186, C187, C506, C618, C641	1uF	ECJ-2YB1A105K	Panasonic	PCC1807CT-ND	Cap, Cerc 0805 1uF 10V 10% X7R
9	24	C574, C580, C586, C592, C598, C604, C610, C616, C658, C661, C665, C666, C678, C680, C682, C684, C706, C712, C720, C726, C739, C740, C743, C750	4.7uF	ECJ-2FF1C475Z	Panasonic	PCC2232CT-ND	Cap, Cerc 0805 4.7uF 16V +80%/-20% F
10	18	C22, C23, C24, C25, C55, C56, C57, C64, C85, C86, C87, C88, C103, C104, C105, C112, C154, C158	22uF	C2012X5R0J226M	TDK Corp	445-1422-2-ND	Cap, Cerc 22uF 6.3V 20% X5R 0805
11	84	C204, C206, C235, C236, C243, C244, C251, C252, C274, C278, C282, C284, C289, C290, C295, C296, C314, C318, C322, C324, C329, C330, C335, C336, C386, C390, C394, C396, C503, C516, C547, C548, C571, C573, C577, C581, C583, C585, C589, C591, C595, C597, C601, C603, C607, C609, C613, C615, C622, C623, C644, C645, C651, C653, C655, C660, C662, C667, C670, C674, C679, C681, C683, C686, C688, C690, C693, C694, C708, C709, C710, C713, C717, C721, C723, C727, C730, C733, C735, C737, C741, C742, C744, C749	1.0uF	ECS-T1VY105R	Panasonic	P11332CT-ND	Cap, Tant 1.0uF 20V 20% SMT3216
12	4	C496, C498, C639, C640	22uF	ECS-T1ED226R	Panasonic	PCS5226CT-ND	Cap, Tant 22uF 25V 20% SMT7443
13	8	C488, C490, C491, C493, C494, C500, C502, C504	47uF	T494B476M010AS	Kemet	399-3007-1-ND	Cap, Tant 47uF 10V 20% T494 SERIES size B (3528)
14	61	C208, C210, C212, C214, C216, C219, C220, C222, C225, C226, C228, C231, C256, C257, C258, C259, C260, C261, C268, C269, C300, C301, C302, C311, C344, C345, C346, C347, C348, C349, C356, C357, C363, C364, C365, C367, C368, C369, C370, C371, C372, C373, C380, C381, C415, C416, C417, C421, C507, C509, C523, C530, C537, C619, C627, C628, C629, C638, C642, C696, C703	4.7uF	ECS-T1DY475R	Panasonic	P11322CT-ND	Cap, Tant SMT3216 4.7uF 20V 20%
15	1 1	J8		MTSW-150-07-G-D-175 MTSW-116-07-G-D-175	Samtec		Con, .1 center 58 x 2 header terminal unshrouded combine 2 part numbers for the correct pin count
16	0.33	U56		MTSW-124-07-G-S-175	Samtec		Con, 04 x 1 build
17	0.33	J7		TSW-124-07-G-S	Samtec		con, 08 x 1 .025 sq pin straight header (break to size)
18	1	J6		MTSW-149-07-G-D-175	Samtec		Con, 98 pin header .1 center double row
19	2	J1, J4		64176	ERNI	N/A	Con, right angle female cPCI 110 pin J1, J4 position
20	2	J2, J5		64785	ERNI	n/a	Con, right angle female cPCI 110 pin J2, J5 position
21	1	J3		64784	ERNI		Con, right angle female cPCI 95 pins J3 position
22	1	J11		MTSW-125-22-G-D-300-RA	Samtec		Con, right angle header 50 pin .1 ctr

ITEM	Total	REFDES	Value	Part Number	MFR	PN Digikey	Description
23	18	D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20		ZMS2800TA	Zetex	ZMS2800CT-ND	Diode, SCHOTTKY 70V 15MA SOD-323
24	2	D1, D2		SMCJ5.0CA-13	Diodes, Inc.	SMCJ5.0CADICT-ND	Diode, TVS 1500W SMC 5V
25	2	U69, U82		AD8802AR	Analog Devices		IC, 12 channel, 8 bit trimDAC's with pwr shutdown
26	18	U2, U3, U4, U5, U6, U7, U8, U9, U10, U11, U12, U13, U14, U15, U16, U17, U18, U19		AD7671AST	Analog Devices		IC, 16 Bit 1 MSPS CMOS ADC
27	1	U57		ADR421AR	Analog Devices		IC, 1ppm/deg C Lo noise, Voltage reference
28	3	U51, U53, U54		XCR3384XL-7-PQ208C	Xilinx		IC, 256 macrocell CPLD
29	1	U55		XCV300E-6PQ240C	Xilinx		IC, FPGA Virtex 1.8V
30	24	U70, U71, U72, U73, U74, U75, U76, U77, U83, U84, U85, U86, U87, U88, U89, U90, U93, U94, U95, U96, U97, U98, U99, U100		OPA277UA	TI / Burr Brown		IC, Precision low noise & input bias current op amp
31	1	U80		TPS75218QPWP	TI		IC, Voltage regulator, 2A low dropout, fast transient
32	1	U81		TPS75233QPWP	TI		IC, Voltage regulator, 2A low dropout, fast transient
33	0.13	(Y1)		714-93-120-31-007	Mill Max		Jack pins, fit .040 dia hole .018 dia pin (break to size)
34	0.25	JP2		TSW-124-07-G-S	Samtec		Jumper, 2 x1 .025 sq pin straight header (break to size)
35	0.25	JP4		MTSW-102-07-G-2-175	Samtec		Jumper, 2 x1 .175 post length .025 sq pin strt header (bre
36	0.25	JP7		TSW-124-07-G-S	Samtec		Jumper, 2 x1 .025 sq pin straight header (break to size)
37	0.13	JP1		TSW-124-07-G-S	Samtec		Jumper, 3 x1 .025 sq pin straight header (break to size)
38	1	D21		SSF-LXH4RAID	Lumex	67-1303-ND	LED, T-1 Red right angle mount
39	1	Y1	40.00M Hz	EP13 00 HS ET TS 40.000M	Ecliptek	{PN Digikey}	Oscillator, half size 40.0Mhz with tri state
40	5	R377, R390, R392, R400, R410	0	9C08052A0R00JLHFT	Yageo	311-0.0ACT-ND	Resistor, 0 5% 1/8 Watt 0805
41	42	R19, R20, R39, R42, R59, R62, R75, R78, R105, R106, R107, R108, R109, R124, R125, R126, R169, R170, R171, R172, R173, R188, R189, R190, R233, R234, R235, R236, R237, R252, R253, R254, R325, R326, R342, R343, R344, R352, R378, R379, R380, R381	0	9C06031A0R00JLHFT	Yageo	311-0.0GTR-ND	Resistor, 0 ohm 1/10W 5% 0603
42	6	R560, R565, R570, R575, R580, R585	10	ERJ-6ENF10R0V	Panasonic	P10.0CCT-ND	Resistor, 10 1% 1/10 Watt 0805
43	3	R312, R321, R322	10	EXB-V8V-100JV	Panasonic	Y4100CT-ND	Resistor, 10 ohm Concave chip Array 4 iso 5% 1/16 W
44	5	R384, R385, R386, R387, R389	10.0K	ERJ-6ENF1002V	Panasonic	P10.0KCCT-ND	Resistor, 10.0K 1% 1/10 Watt 0805
45	1	R54	15	ERJ-6ENF15R0V	Panasonic	P15.0CCT-ND	Resistor, 15.0 1% 1/10 Watt 0805
46	1	R383	2.74K	ERJ-6ENF2741V	Panasonic	P2.74KCCT-ND	Resistor, 2.74K 1% 1/10 Watt 0805
47	3	R301, R311, R316	49.9	ERJ-6ENF49R9V	Panasonic	P49.9CCT-ND	Resistor, 49.9 1% 1/10 Watt 0805
48	16	R302, R303, R304, R305, R307, R308, R309, R310, R313, R314, R315, R317, R318, R319, R320, R340	10	742C163 100 J	CTS	742C163100JCT-ND	Resistor, Concave chip Array 8 iso 10 ohm 5% 1/16 W
49	1	SW1		EP12SD1ABE	ITT Cannon	CKN4008-ND	Switch, SPDT momentary push button right angle
50	53	TP1, TP2, TP3, TP4, TP9, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP25, TP26, TP57, TP58, TP59, TP60, TP61, TP62, TP63, TP64, TP65, TP66, TP67, TP68, TP69, TP70, TP71, TP72, TP73, TP74, TP75, TP76, TP77, TP78, TP79, TP80, TP81, TP82, TP83, TP84, TP85, TP86, TP87, TP88, TP89, TP90, TP91, TP92, TP93		TP-108	Components Corporation		Test point, SMT low profile loop
51	4	TP47, TP48, TP49, TP50	GND	TP-105-??-00	Components Corporation		Test Point, wire form loop black

ITEM	Total	REFDES	Value	Part Number	MFR	PN Digikey	Description
52	6	TP6, TP7, TP8, TP10, TP12, TP13		TP-105-??-04	Components Corporation		Test Point, wire form loop yellow
53	1	JP3		Wire short 18-20 awg			
54	16	TP15, TP28, TP29, TP31, TP32, TP33, TP34, TP36, TP37, TP39, TP41, TP42, TP43, TP44, TP45, TP55		NOT INSTALLED			
55	3	U1, U20, U64 (NOT INSTALLED)		MAX6632MUT-T			
56	1	U64 (NOT INSTALLED)		DS2401			

Part Number	MFR	Description	Package Markings	COMMENTS
AD7814ARM	Analog Devices	IC, 10 bit digital temp sensor	C AA	
XCR3384XL-7-PQ208C	Xilinx	IC, 256 macrocell CPLD	XCR3384XL PQ208AMN0301 7C	0301 is the date code
MAX9112EKA-T	Maxim	IC, Dual LVDS Line Drvrs w/Ultra low pulse skew	AAD0	
MAX9113EKA	Maxim	IC, Dual LVDS Line Rcvr w/ultra low Pulse skew	AAED	
SMCJ5.0CA-13	Diodes, Inc.	Diode, TVS 1500W SMC 5V Bi-directional	BDE	Currently installed is GDE
SN74AHC1G04DBVR	TI	IC, single inverter gate	AD4S	
TPS75218QPWP	TI	IC, Voltage regulator, 1.8V 2A low dropout, fast transient	PT75218 33T DF8J	
TPS75233QPWP	TI	IC, Voltage regulator, 3.3V 2A low dropout, fast transient	PT75233 39T EL2H	
XC18v02VQ44I	Xilinx	IC, Configuration Prom w/ in sys programming 2M capacity	XC1802VQ44AEN0345	
XCV300E-6PQ240C	Xilinx	IC, FPGA Virtex 1.8V	XCV300E PQ240AMS0101 6C	0101 is the date code
SMCJ12A-13	Diodes, Inc.	Diode, TVS 1500W SMC 12V unidirectional	LT02 GEE	