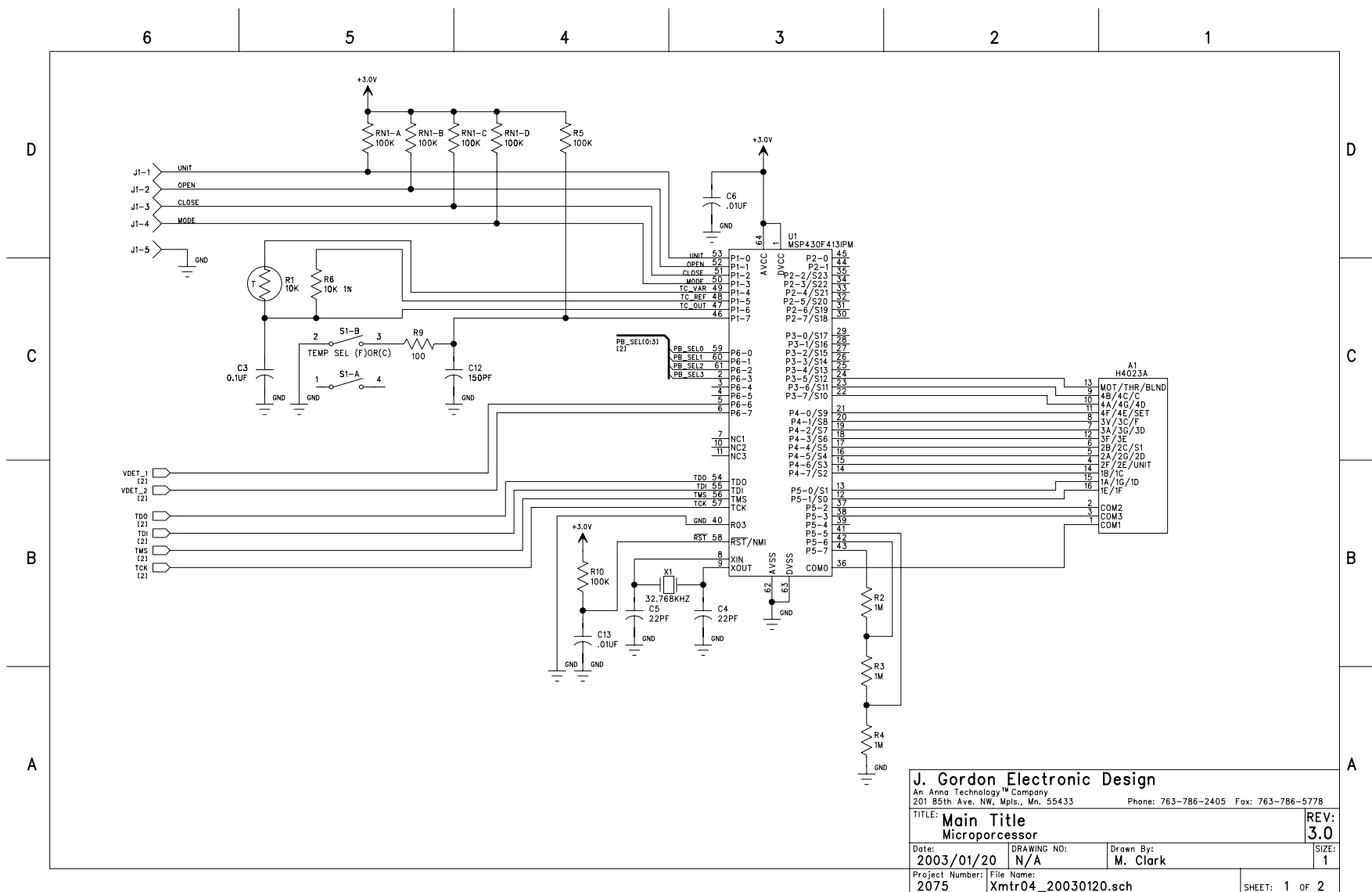
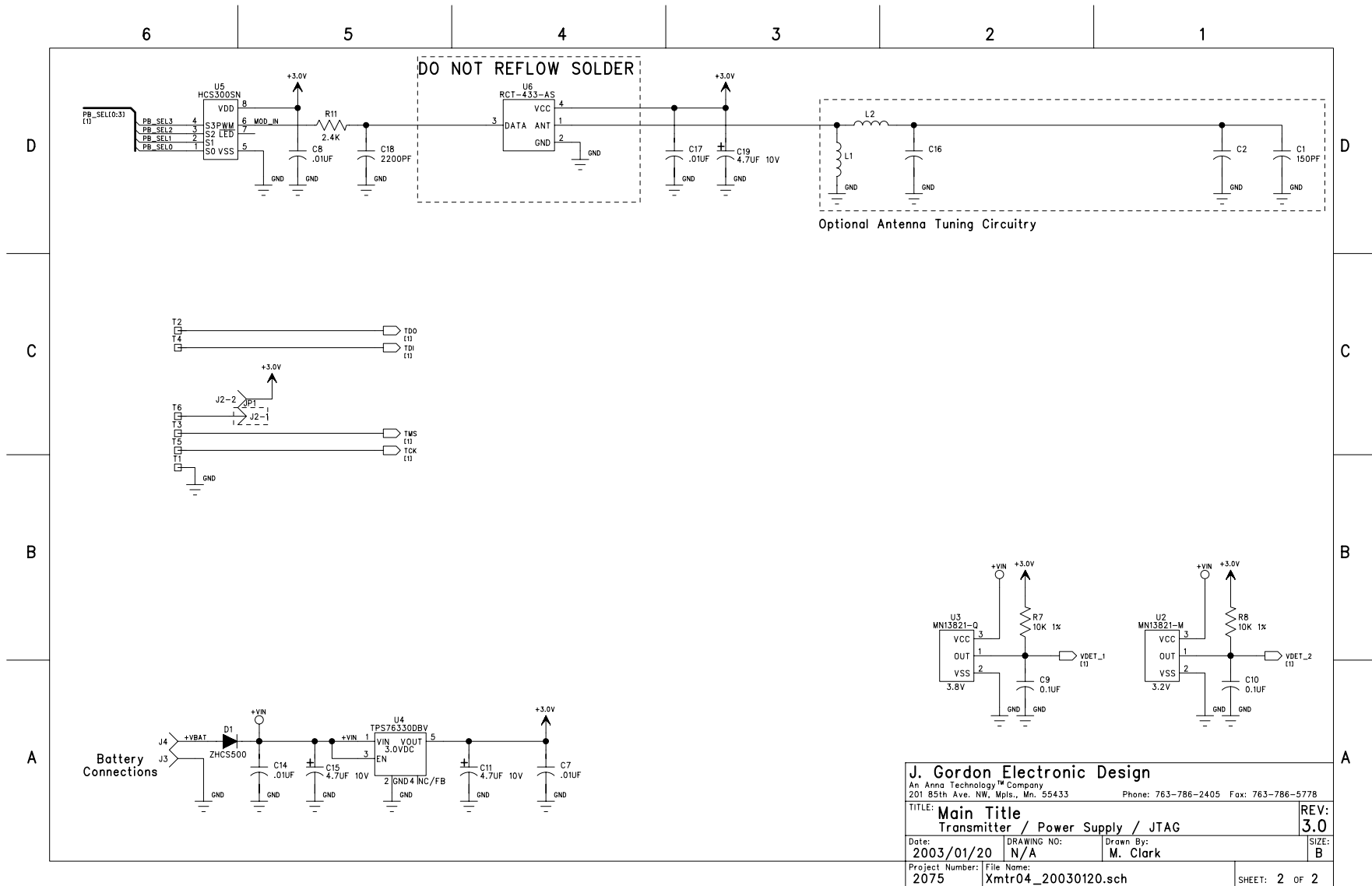




J. Gordon Electronic Design An Anna Technology™ Company 201 85th Ave. NW, Mpls., Mn. 55433 Phone: 763-786-2405 Fax: 763-786-5778			
TITLE: Main Title Microprocessor			REV: 3.0
Date: 2003/01/20	DRAWING NO: N/A	Drawn By: M. Clark	SIZE: 1
Project Number: 2075	File Name: Xmtr04_20030120.sch	SHEET: 1 OF 2	



Bill of Materials for Truth Hardware Transmitter Board Rev. 04 (2075)

#	Qty	Reference	Description	Value	Manufacturer
1.	1	A1	LCD DISPLAY MODULE, CUSTOM GRAPHIC	LCD	LXD H4023A
2.	2	C1 C12	CAPACITOR, CERAMIC, 150PF, 50V, 5%, C0G / NPO, 0805, SMD	150PF	(ANY) AVX 08055A151JAT KEMET C0805C151J5GAC PANASONIC ECU-V1H151JCG DIGI-KEY PCC151CGCT-ND
3.	3	C11 C15 C19	CAPACITOR, TANTALUM, EIA-B , 4.7UFD, 10VDC, 10%	4.7UF 10V	KEMET T491B475K010AS
4.	1	C18	CAPACITOR, CERAMIC, 2200PF, 50V, 10%, X7R, 2012 (0805), SMD	2200PF	(ANY) AVX 08055C222KAT PANASONIC ECU-V1H222KBN DIGI-KEY PCC222BNCT-ND
5.	2	C2 C16		TBD	
6.	3	C3 C9-10	CAPACITOR, CERAMIC, 0.1UF, 50V, 10%, X7R, 2012 (0805), SMD	0.1UF	(ANY) CAL-CHIP GMC21X7R104K50NT PANASONIC ECJ2YB1H104K DIGI-KEY PCC1840TR-ND
7.	2	C4-5	CAPACITOR, CERAMIC, 22PF, 50V, 5%, NPO, 2012 (0805), SMD	22PF	(ANY) AVX 08055A220JAT PANASONIC ECU-V1H220JCN DIGI-KEY PCC220CNCT-ND
8.	6	C7-8 C13-14 C6 C17	CAPACITOR, CERAMIC, .01UF, 50V, 10%, X7R, 2012 (0805), SMD	.01UF	(ANY) AVX 08055C103KAT PANASONIC ECUV1H103KBG DIGI-KEY PCC103BNCT-ND
9.	1	D1	RECTIFIER, SCHOTTKY BARRIER, 40V, 0.5A, VF 0.55V, SMD	ZHCS500	(ANY) ZETEX ZHCS500TA DIGI-KEY ZHC500CT-ND
10.	1	J1	CONNECTOR ASSEMBLY, ZIF-LINE, 5 POS, 1.27 (0.050") SPACING, FLEX-FILM	5 POS ZIF	AMP 5-487576-0

Bill of Materials for Truth Hardware Transmitter Board Rev. 04 (2075)

#	Qty	Reference	Description	Value	Manufacturer
11.	1	J2	HEADER, .1"LS .025"SQ POST, 2 POS.		(ANY) SULLINS PCT02SAAN DIGI-KEY S1012-02-ND
12.	2	J3-4	WIRE POINT ON PCB	N/A	N/A - ON PCB
13.	1	JP1	SHUNT, SHORTING BLOCK .1"LS		DIGI-KEY 929950-00-ND DIGI-KEY 929950-06-ND DIGI-KEY 929957-08-ND
14.	1	L1		TBD	
15.	1	L2		TBD	
16.	1	R1	THERMISTOR, 10K, NTC, 5%, RADIAL	10K	(ANY) PANASONIC ERTD2FHJ103S
17.	1	R11	RESISTOR, 2.4K, 5%, 1/10W, 2012 (0805), SMD	2.4K	(ANY) DIGI-KEY P2.4KACT-ND
18.	3	R2-4	RESISTOR, 1.0M, 5%, 1/10W, 2012 (0805), SMD	1M	(ANY) DIGI-KEY P1.0MACT-ND
19.	2	R5 R10	RESISTOR, 100K, 5%, 1/10W, 2012 (0805), SMD	100K	(ANY) DIGI-KEY P100KACT-ND
20.	3	R6-8	RESISTOR, 10.00K, 1%, 1/10W, 2012 (0805), SMD	10K 1%	(ANY) PANASONIC ERJ6ENF1002 DIGI-KEY P10.0KCCT-ND
21.	1	R9	RESISTOR, 100, 5%, 1/10W, 2012 (0805), SMD	100	(ANY) DIGI-KEY P100ACT-ND
22.	1	RN1	NETWORK, 100K, 1/16W, ISOLATED, 4 RESISTORS, SMD	100K	CTS 742083104J DIGI-KEY 742-083-R104CT-ND
23.	1	S1	DIP, SPST, 2 POS, AU, SEALED, SMD	SD02H0SK	C&K COMPONENTS, INC. SD02H0SK DIGI-KEY CKN3054-ND
24.	6	T1-6	TESTPOINT		N/A - COPPER PAD ON PCB

Bill of Materials for Truth Hardware Transmitter Board Rev. 04 (2075)

#	Qty	Reference	Description	Value	Manufacturer
25.	1	U1	MICROCONTROLLER, MIXED SIGNAL, 8K, 16BIT, LCD DRIVER, 1.8-3.6VDC, SMD	MSP430F413IPM	TEXAS INSTRUMENTS MSP430F413IPM
26.	1	U2	VOLTAGE DETECTION, 3.2VDC, N-CH OPEN DRAIN OUTPUT, SMD	3.2V	PANASONIC MN13821-M(TX) DIGI-KEY MN13821-MCT-ND DIGI-KEY MN13821-MTR-ND
27.	1	U3	VOLTAGE DETECTION, 3.8VDC, N-CH OPEN DRAIN OUTPUT, SMD	3.8V	PANASONIC MN13821-Q(TX) DIGI-KEY MN13821-QCT-ND DIGI-KEY MN13821-QTR-ND
28.	1	U4	VOLTAGE REGULATOR, LINEAR, 3.0VDC, 0.15A, LDO, L PWR, SMD	3.0VDC	TEXAS INSTRUMENTS TPS76330DBVT TEXAS INSTRUMENTS TPS76330DBVR ZETEX ZXCL300E5
29.	1	U5	ENCODER, CODE HOPPING, KEELOQ, SMD	HCS300SN	MICROCHIP HCS300SN
30.	1	U6	TRANSMITTER, 433.92MHZ, OOK, SAW-STABILIZED, SMD	RCT-433-AS	RADIOTRONIX, INC. RCT-433-AS
31.	1	X1	CRYSTAL, 32.768KHZ, SERIES RESISTANCE 35 OHM	32.768KHZ	EPSON AMERICA INC. C-001R 32.768K-A DIGI-KEY SE3201-ND