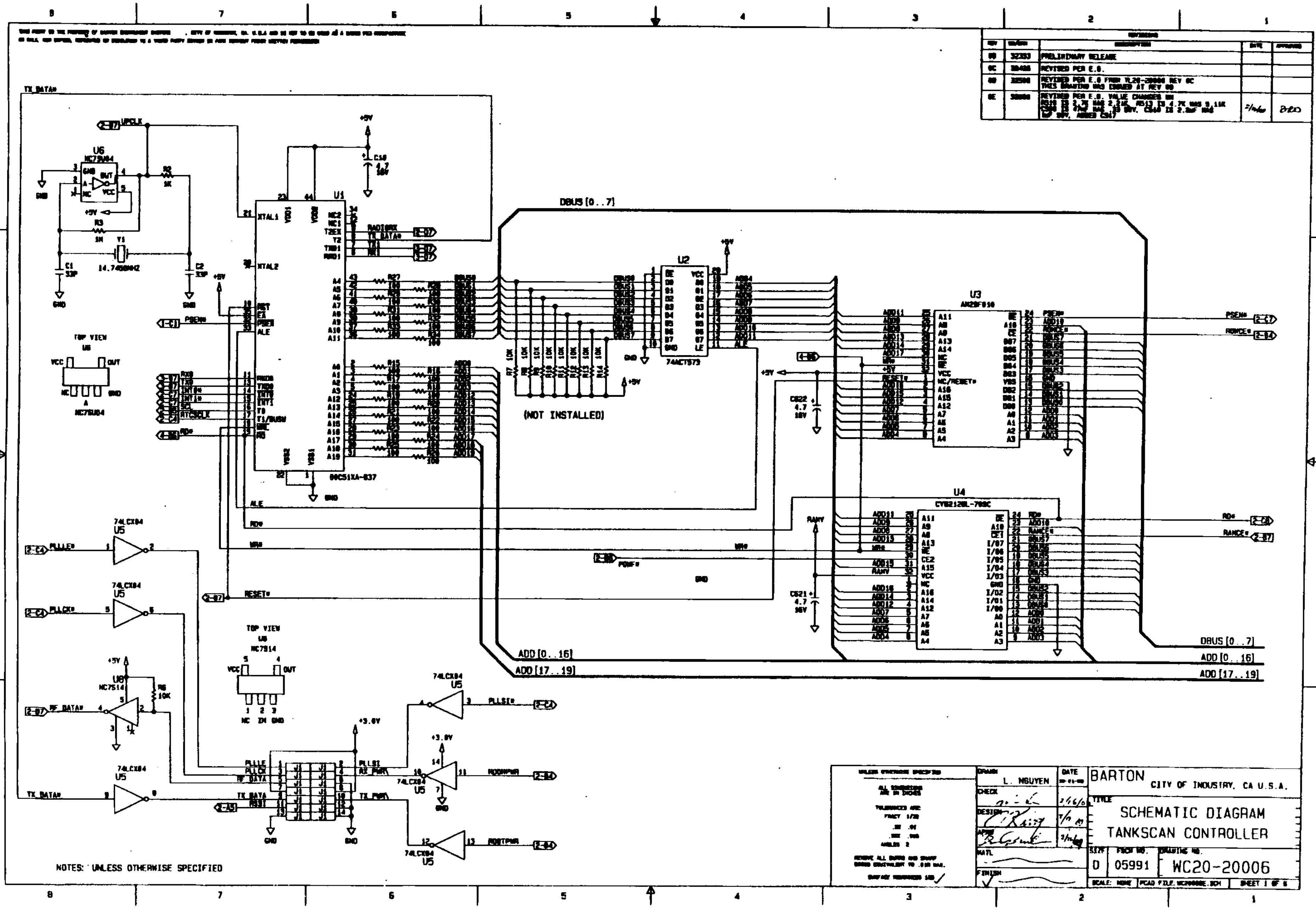
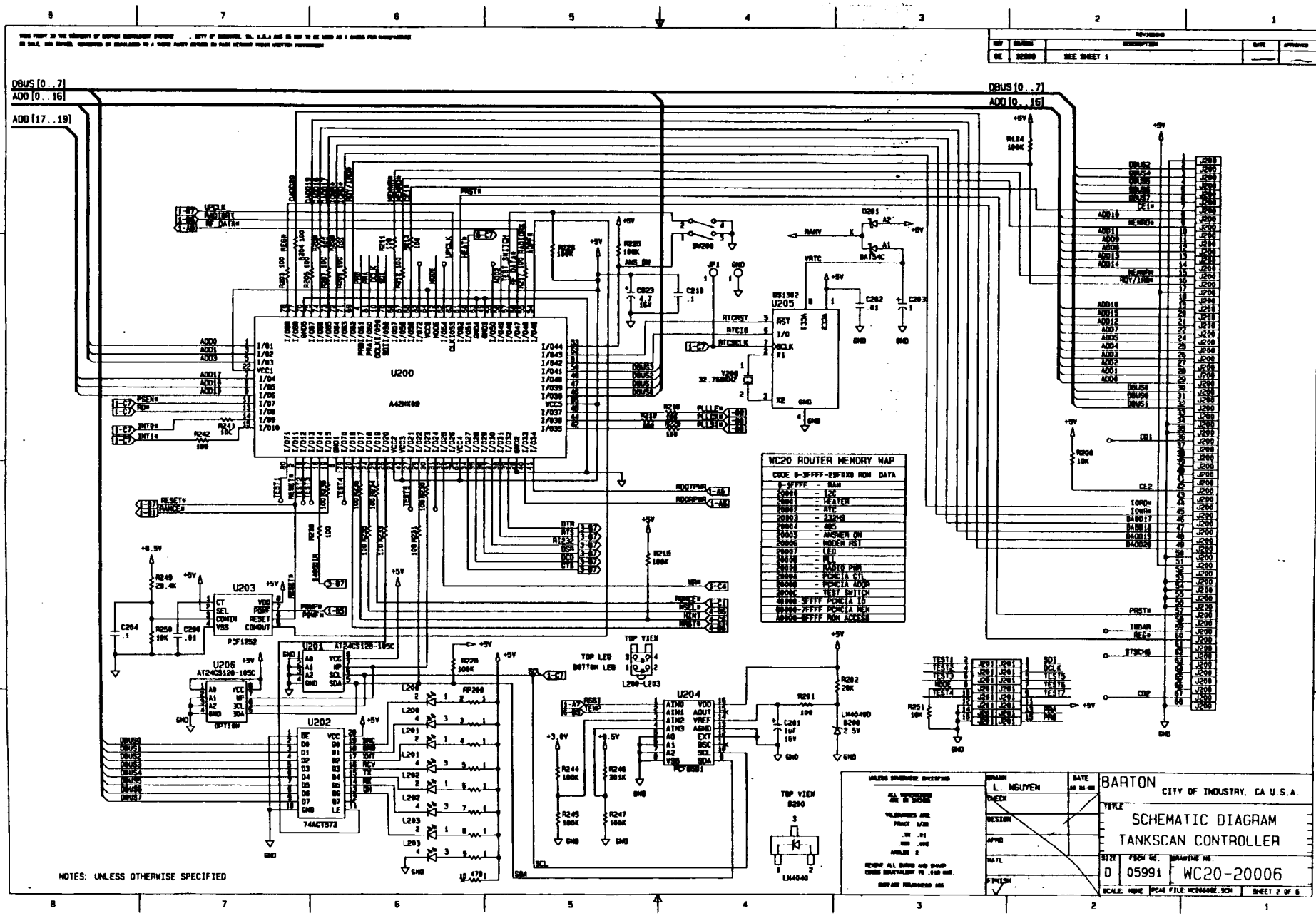
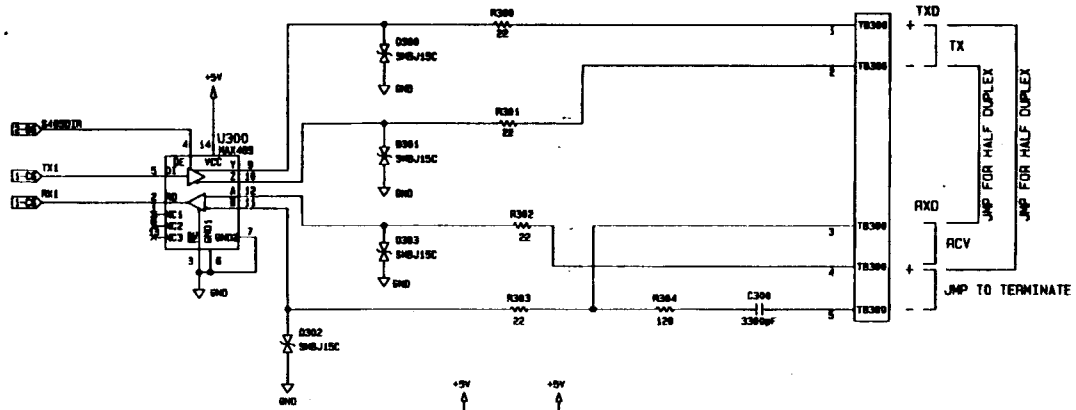
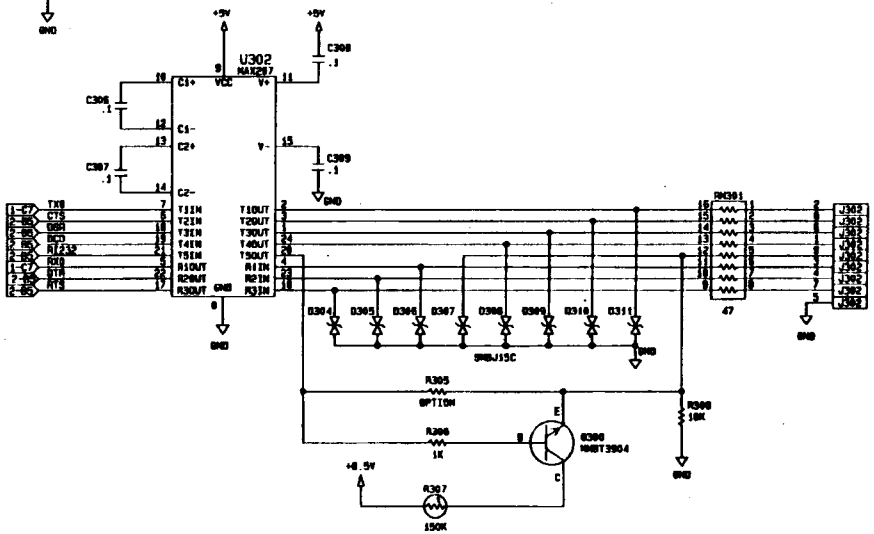
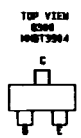

DBUS [0..7]
ADD [0..16]
ADD [17..19]
U1
80C51XA-G37
U2
74ACT573
U3
AM29F010
U4
CY62128L-70SC
U5
74LCX04
U6
NC7SU04
U8
NC7S14
TOP VIEW
(NOT INSTALLED)
14.7456MHZ
NOTES: UNLESS OTHERWISE SPECIFIED
DRAWN L. NGUYEN
BARTON
CITY OF INDUSTRY, CA U.S.A.
SCHEMATIC DIAGRAM
TANKSCAN CONTROLLER
D
05991
WC20-20006


DBUS [0..7]
ADD [0..16]
ADD [17..19]
U200
A42MX09
U201 AT24C128-10SC
U202
74ACT573
U203
PCF1252
U204
PCF8591
U205
BQ1302
U206
AT24C128-10SC
OPTION
WC20 ROUTER MEMORY MAP
CODE 0-3FFFF-23F8X8 ROM DATA
0-1FFFF - RAM
20000 - I2C
20001 - HEATER
20002 - RTC
20003 - 232HS
20004 - ABS
20005 - ANSWER ON
20006 - MODEM RST
20007 - LED
20008 - PRT
20009 - AUDIO PWR
2000A - PCMCIA CTL
2000B - PCMCIA ADDR
2000C - TEST SWITCH
40000-5FFFF PCMCIA IO
60000-7FFFF PCMCIA MEM
80000-BFFFF ROM ACCESS
NOTES: UNLESS OTHERWISE SPECIFIED
BARTON
CITY OF INDUSTRY, CA U.S.A.
SCHEMATIC DIAGRAM
TANKSCAN CONTROLLER
L. NGUYEN
SIZE D
FSCM NO. 05991
DRAWING NO. WC20-20006
SHEET 2 OF 6







REVISIONS				
REV	ECN/DCN	DESCRIPTION	DATE	APPROVED
0E	32000	SEE SHEET 1		

UNLESS OTHERWISE SPECIFIED

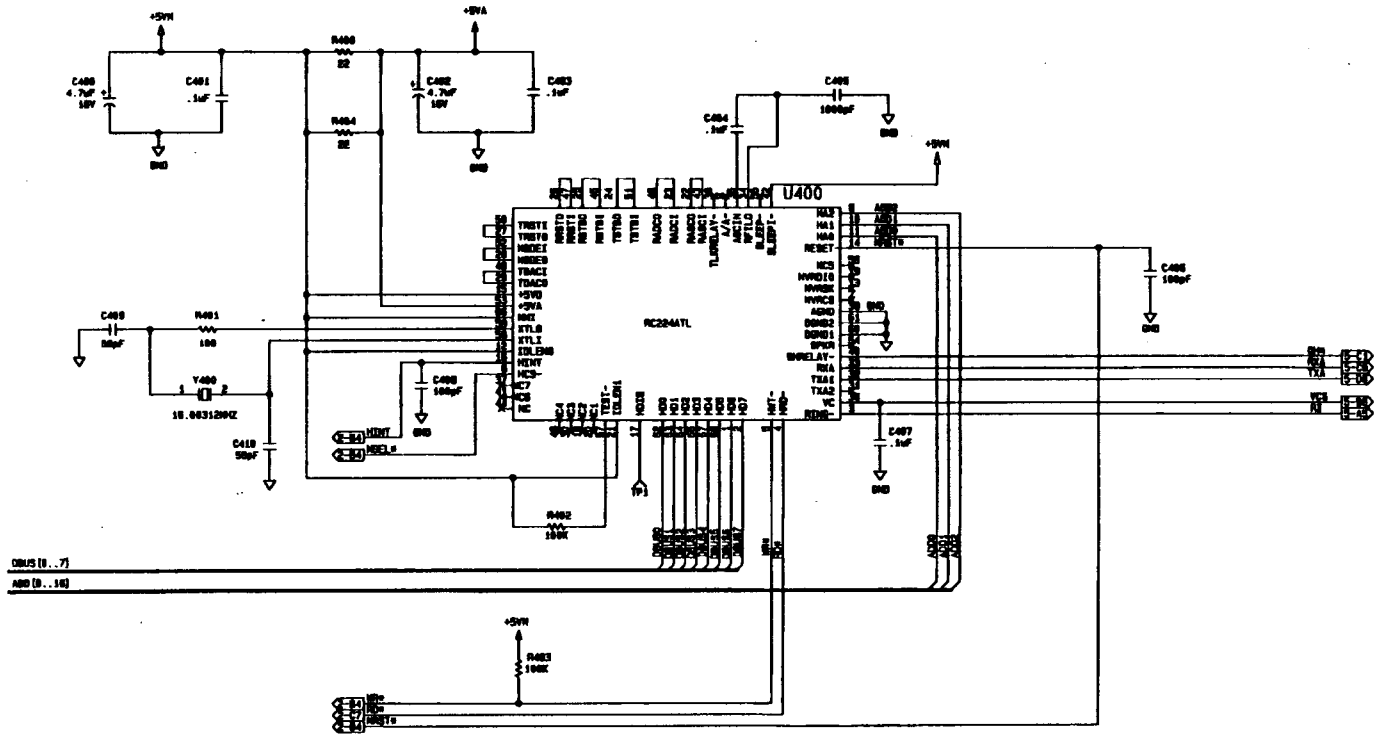
DRAWN	L. NGUYEN	DATE 10-23-00
CHECK		
DESIGN		
APRD		
MATL		
FINISH		

BARTON CITY OF INDUSTRY, CA U.S.A.

TITLE: SCHEMATIC DIAGRAM TANKSCAN CONTROLLER

SIZE	FSCM NO.	DRAWING NO.
D	05991	WC20-20006

SCALE: NONE | PCAD FILE: WC20006E.SCH | SHEET 3 OF 6



NOTES: UNLESS OTHERWISE SPECIFIED

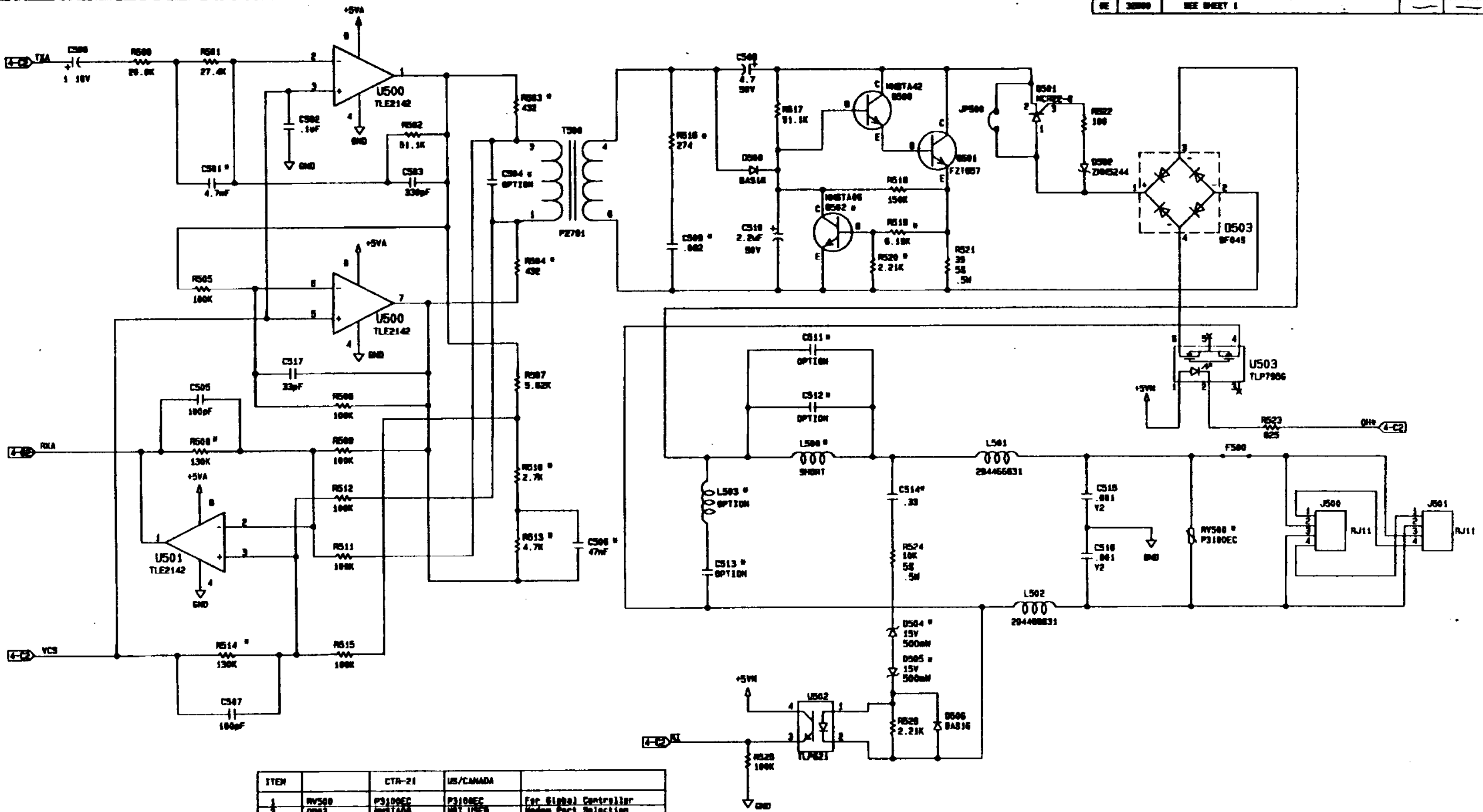
DRAWN	L. NGUYEN
CHECK	
DESIGN	
APPR	
MATL	
FINISH	

BARTON CITY OF INDUSTRY, CA U.S.A.

TITLE: SCHEMATIC DIAGRAM TANKSCAN CONTROLLER

SIZE	FSCM NO.	DRAWING NO.
D	05991	WC20-20006

SCALE: NONE | PCAD FILE: WC20006E.SCH | SHEET 4 OF 8



ITEM		CTR-21	US/CANADA	
1	RV500	P3100EC	P3100EC	For Global Controller
2	Q502	MMBTA06	NOT USED	Modem Port Selection
3	L503	NOT USED	NOT USED	
4	L504	SHORT	SHORT	
5	D504, 505	1N5245B	1N5245B	
6	R508, 514	130K	130K	
7	R519	6.19K	NOT USED	
8	R510	2.7K	10K	
9	R513	4.7K	SHORT	
10	R516	274	SHORT	
11	R503, 504	432	221	
12	R520	2.21K	NOT USED	
13	C514	.33uF/400V	.33uF/400V	
14	C513	NOT USED	NOTUSED	
15	C511, 512	NOTUSED	NOTUSED	
16	C510	2.2uF, 50V	4.7uF, 50V	
17	C506	47nF	NOT USED	
18	C501	4700pF	NOT USED	
19	C509	.002uF	6800pF	
20	C504	NOT USED	6800pF	

3: VALUES OF COMPONENTS WITH AN ASTERISK (*) ARE DETERMINED BY COUNTRY. SEE TABLE1. SCHEMATIC DEPICTS CTR-21 CONFIGURATION.

2: ALL CAPACITOR VALUES ARE IN MICROFARADS.

1: ALL RESISTOR VALUES ARE IN OHMS, 1%.

NOTES: UNLESS OTHERWISE SPECIFIED

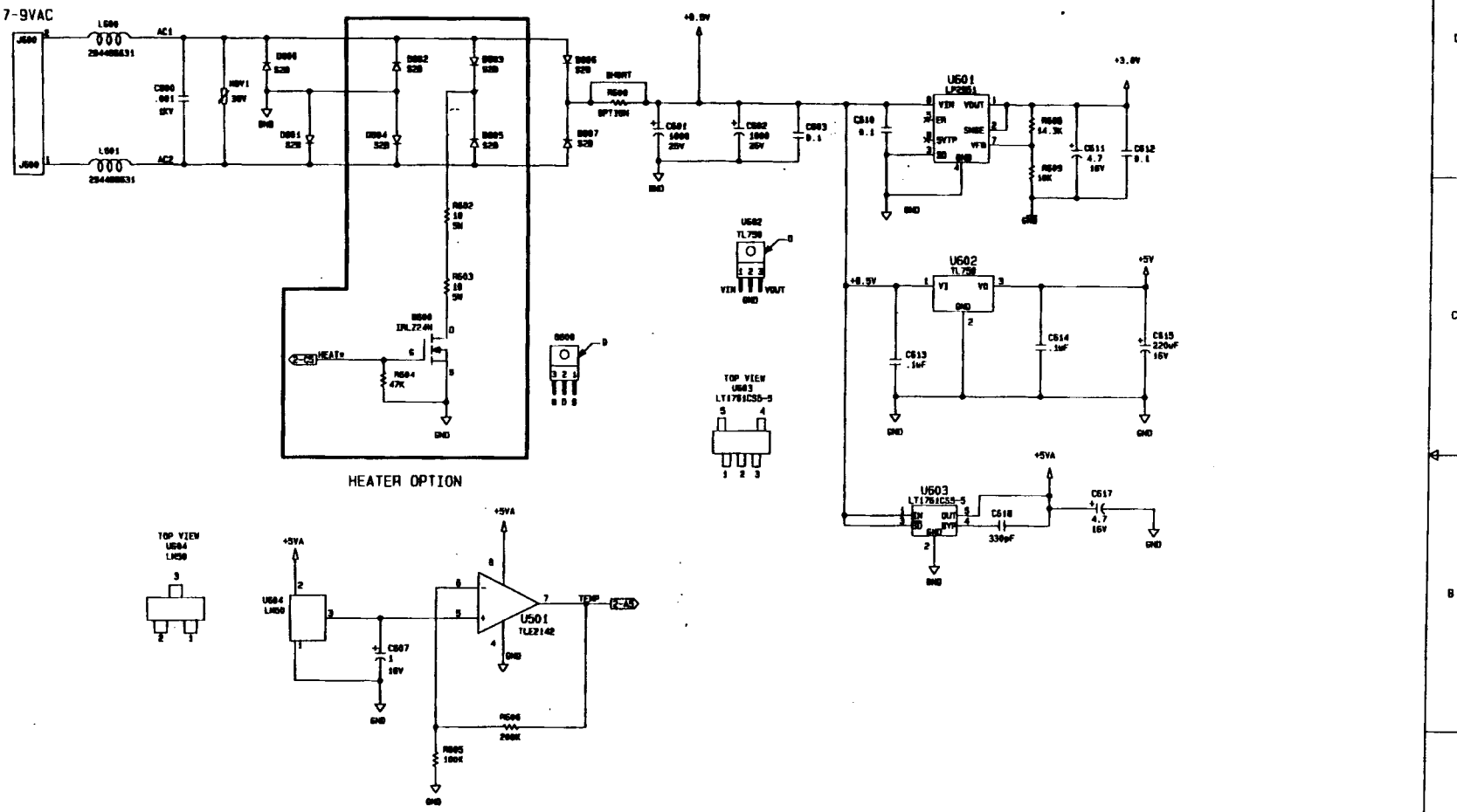
DRAWN: L. NGUYEN

BARTON CITY OF INDUSTRY, CA U.S.A.

TITLE: SCHEMATIC DIAGRAM TANKSCAN CONTROLLER

SIZE: D | FSCM NO. 05991 | DRAWING NO. WC20-20006

SHEET 5 OF 6



NOTES: UNLESS OTHERWISE SPECIFIED

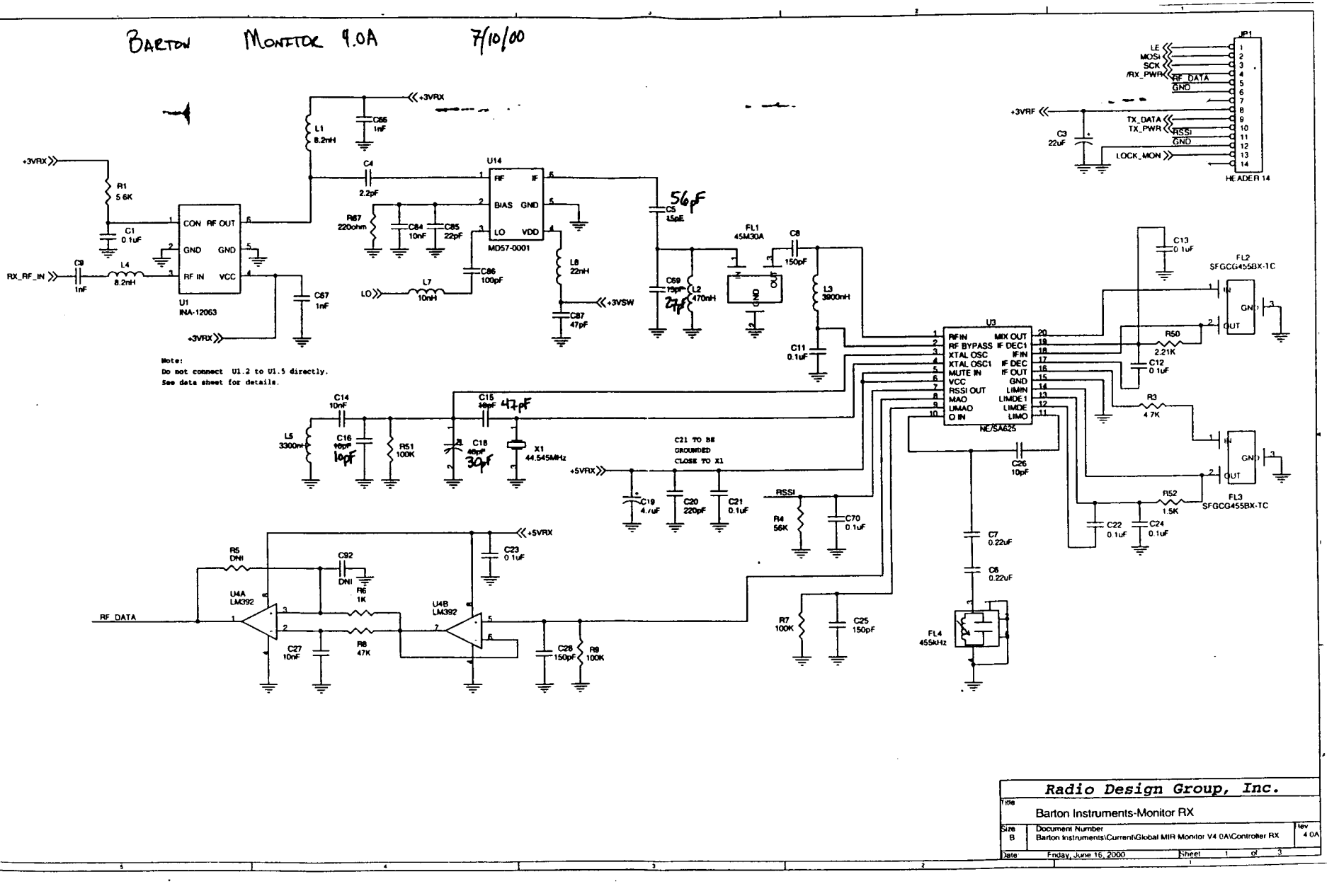
DRAWN	L. NGUYEN	DATE
CHECK		
DESIGN		
APVD		
MATL		
FINISH		

BARTON CITY OF INDUSTRY, CA U.S.A.

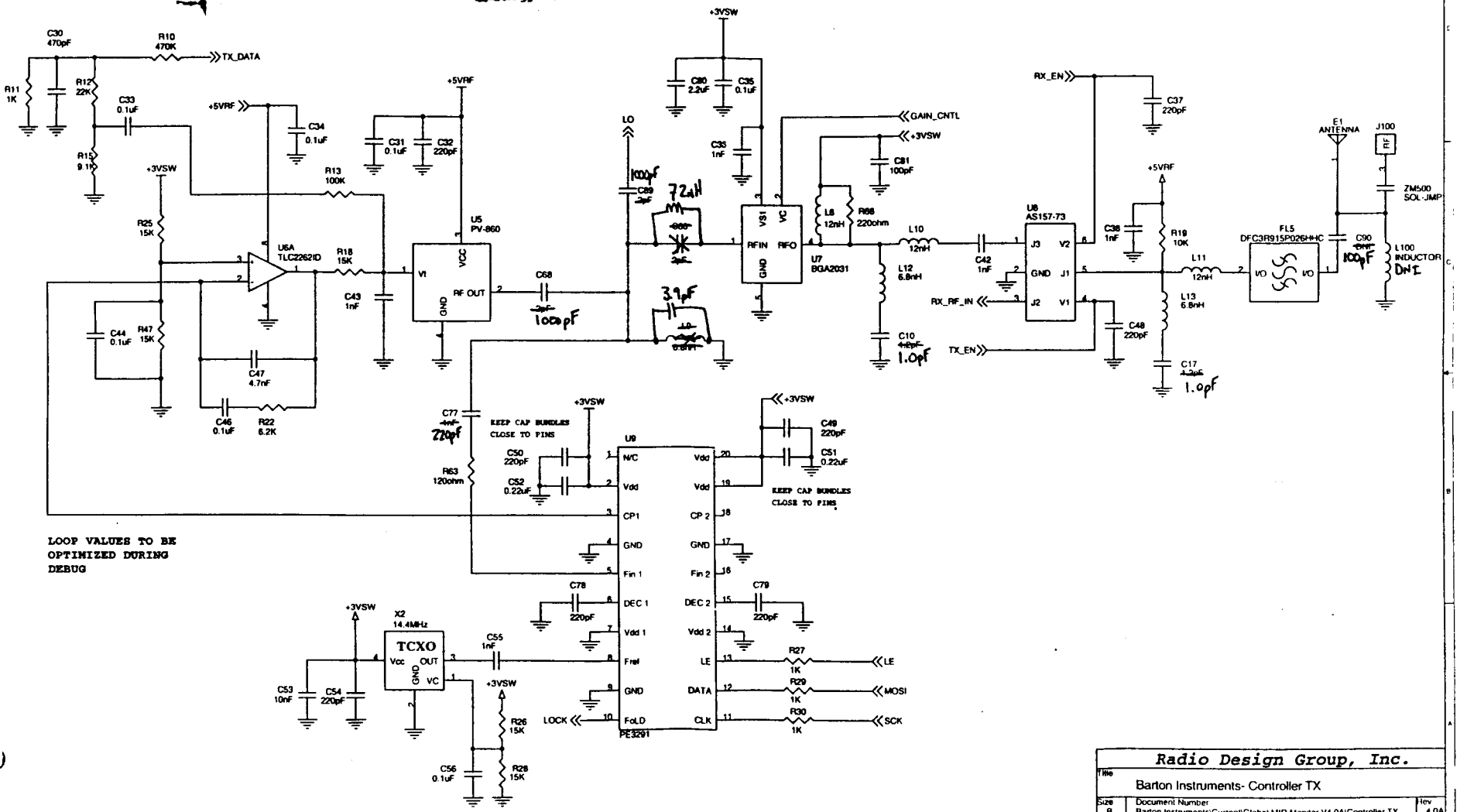
TITLE: SCHEMATIC DIAGRAM TANKSCAN CONTROLLER

SIZE	FSCM NO.	DRAWING NO.
D	05991	WC20-20006

SCALE: NONE | PCAD FILE: WC20006.SCH | SHEET 6 OF 8


BARTON MONITOR 4.0A 7/10/00
JP1
LE
MOSI
SCK
/RX_PWR
RF_DATA
GND
TX_DATA
TX_PWR
RSSI
GND
LOCK_MON
HEADER 14
+3VRF
C3 22uF
+3VRX
L1 8.2nH
C86 1nF
C4 2.2pF
U14
RF
IF
BIAS
GND
LO
VDD
MD57-0001
R67 220ohm
C84 10nF
C85 22pF
C86 100pF
L7 10nH
L8 22nH
C87 47pF
+3VSW
LO
C5 56pF
C69 15pF
L2 470nH
FL1 45M30A
C8 150pF
L3 3900nH
C11 0.1uF
R1 5.6K
C1 0.1uF
RX_RF_IN
C9 1nF
L4 8.2nH
U1 INA-12063
CON RF OUT
GND
RF IN
VCC
C87 1nF
Note:
Do not connect U1.2 to U1.5 directly.
See data sheet for details.
U3
RF IN
RF BYPASS
XTAL OSC
XTAL OSC1
MUTE IN
VCC
RSSI OUT
MAO
LIMAO
O IN
MIX OUT
IF DEC1
IFIN
IF DEC
IF OUT
GND
LIMIN
LIMDE1
LIMDE
LIMO
NE/SA625
C13 0.1uF
FL2 SFGCG455BX-TC
R50 2.21K
C12 0.1uF
R3 4.7K
FL3 SFGCG455BX-TC
R52 1.5K
C22 0.1uF
C24 0.1uF
C26 10pF
C14 10nF
C15 47pF
L5 3300nH
C16 10pF
R51 100K
C18 30pF
X1 44.545MHz
C21 TO BE GROUNDED CLOSE TO X1
+5VRX
C19 4.7uF
C20 220pF
C21 0.1uF
RSSI
R4 56K
C70 0.1uF
C7 0.22uF
C8 0.22uF
R7 100K
C25 150pF
FL4 455kHz
R5 DNI
C92 DNI
C23 0.1uF
U4A LM392
U4B LM392
R6 1K
R8 47K
C27 10nF
C28 150pF
R9 100K
RF_DATA
Radio Design Group, Inc.
Title
Barton Instruments-Monitor RX
Size B
Document Number
Barton Instruments\Current\Global MIR Monitor V4 0A\Controller RX
Rev 4.0A
Date Friday, June 16, 2000
Sheet 1 of 3

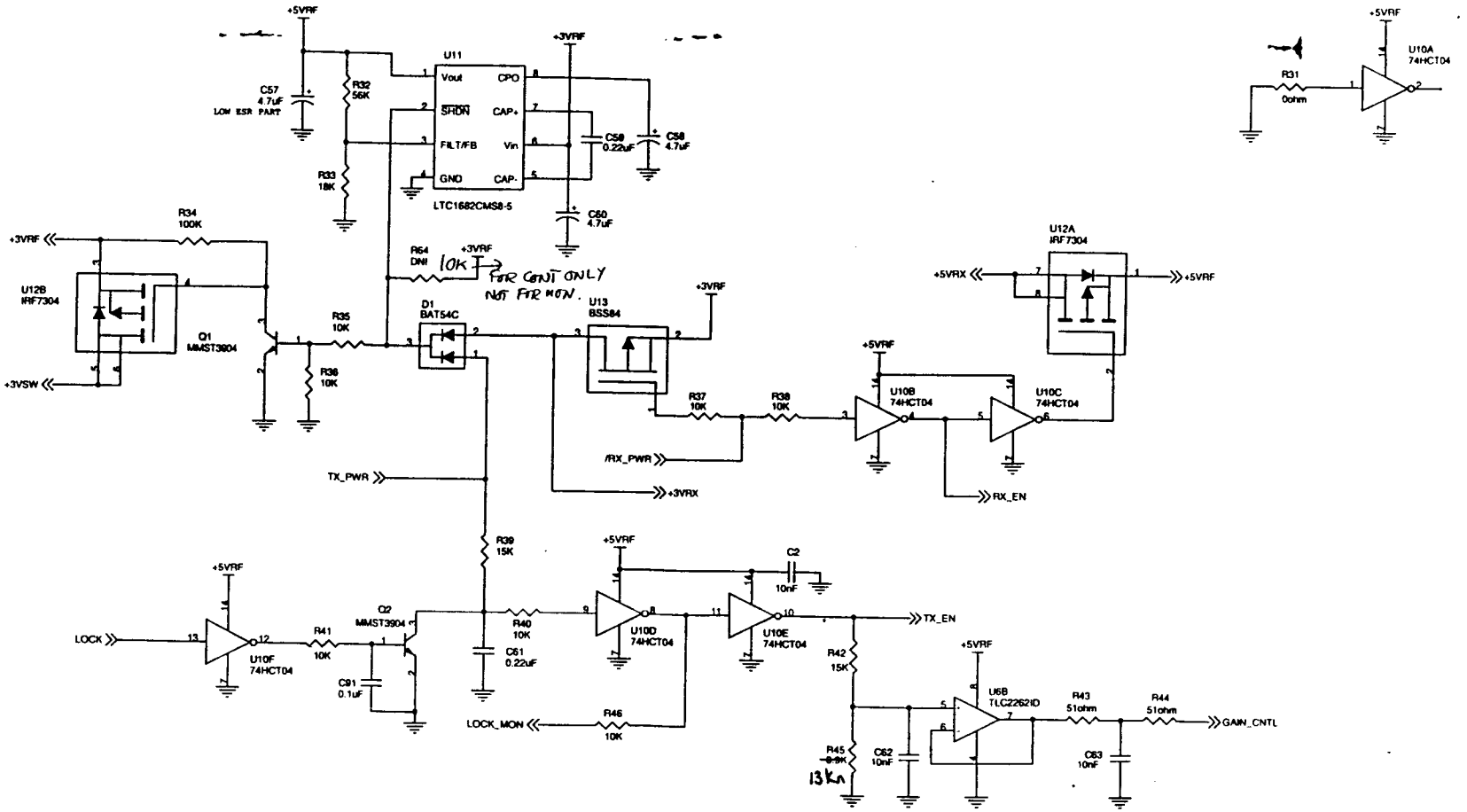
BARTON MONITOR 4.0A 7/10/00



LOOP VALUES TO BE OPTIMIZED DURING DEBUG

Radio Design Group, Inc.		
Title: Barton Instruments- Controller TX		
Size: B	Document Number: Barton Instruments\Current\Global MIR Monitor V4.0A\Controller TX	Rev: 4.0A
Date: Friday, June 16, 2000	Sheet 2 of 3	

BARTON MONITOR 4.0A 7/10/00



Radio Design Group, Inc.		
Title: Barton Instruments- Power		
Size: B	Document Number: Barton Instruments\Current\Global MIR Controller V4.0A\Power	Rev: 4.0A
Date: Friday, June 16, 2000	Sheet 3 of 3	