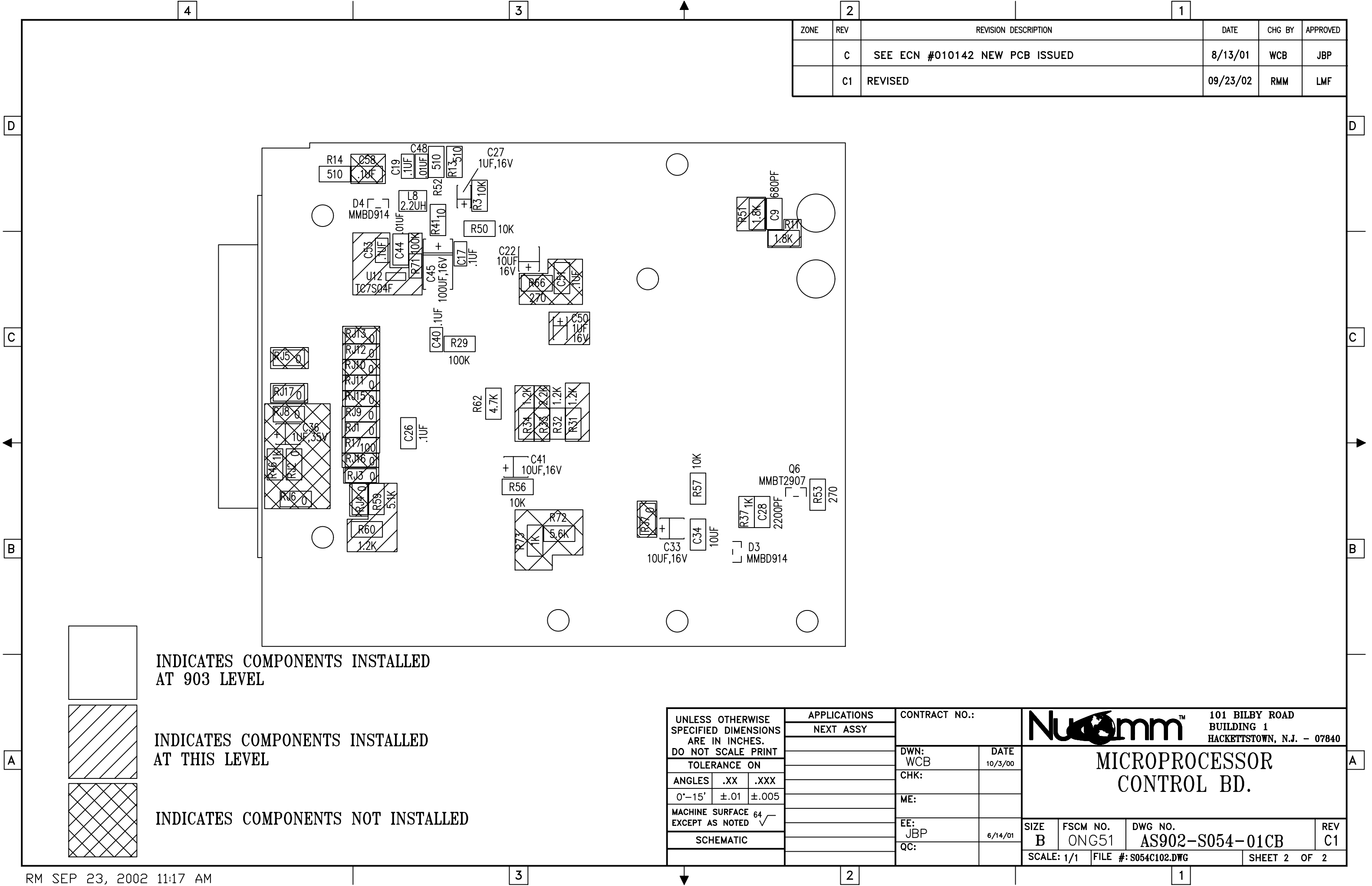




6

5

4

3

2

1

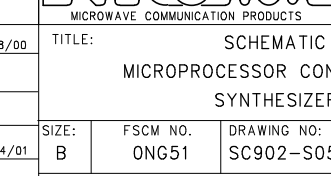
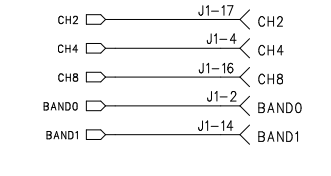
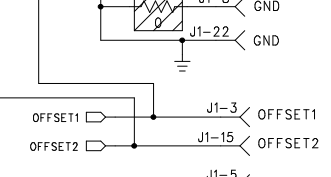
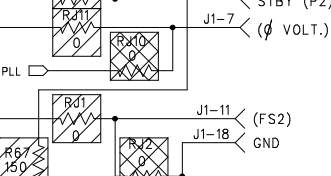
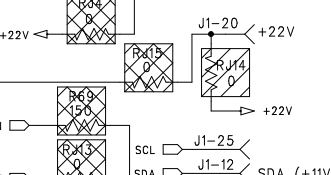
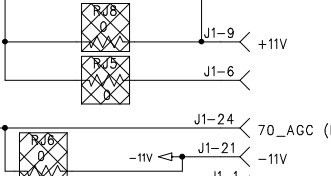
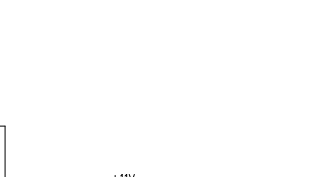
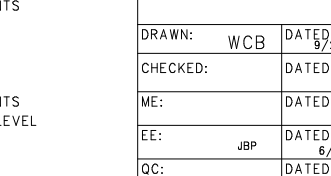
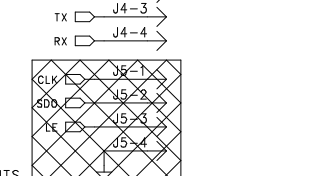
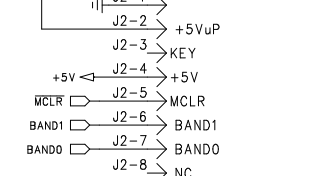
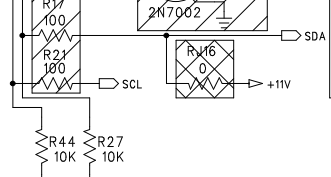
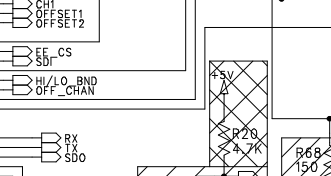
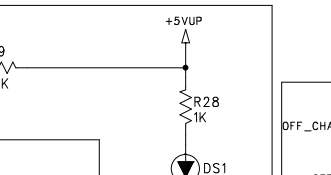
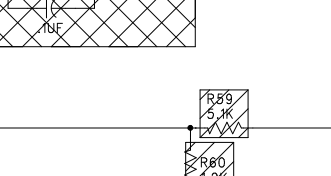
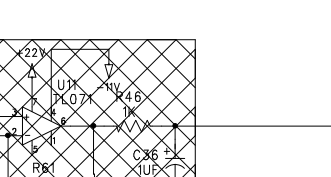
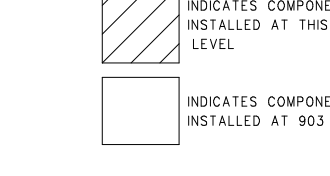
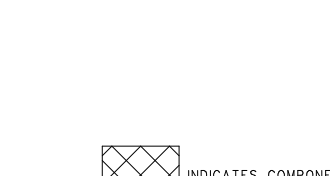
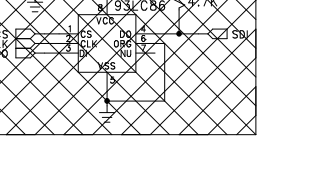
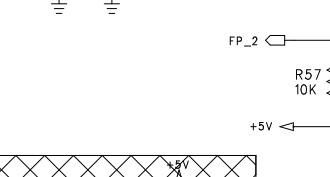
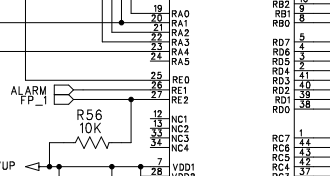
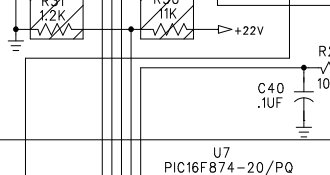
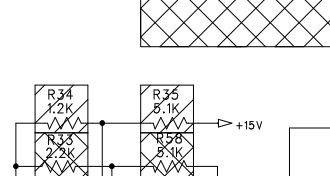
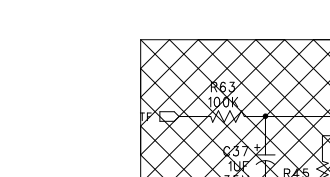
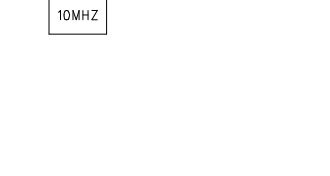
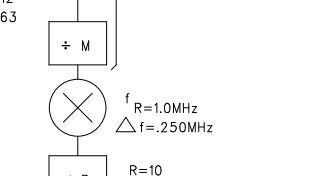
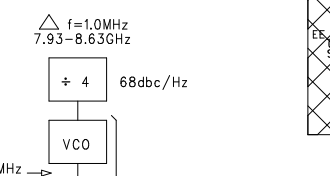
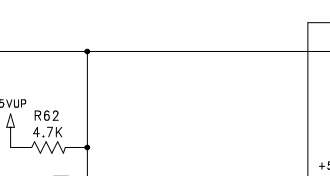
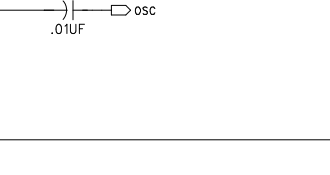
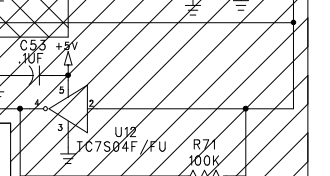
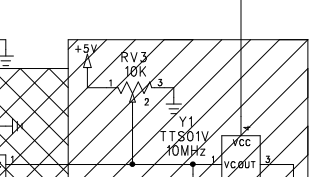
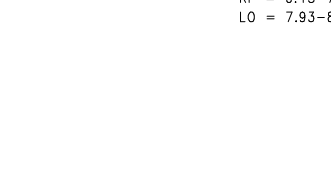
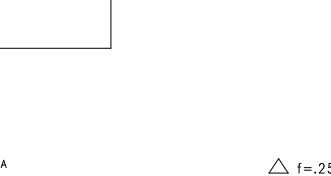
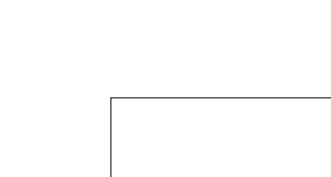
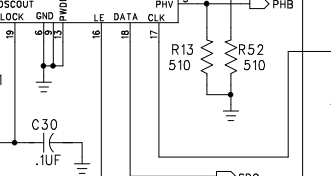
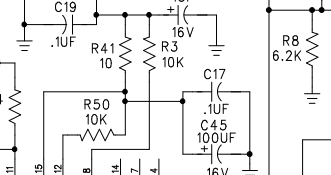
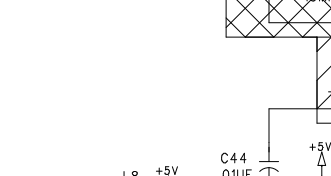
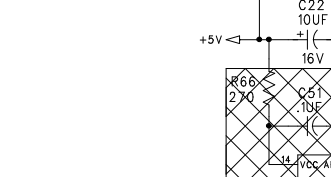
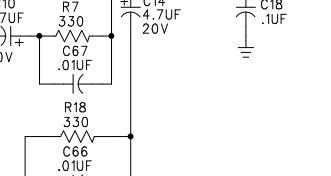
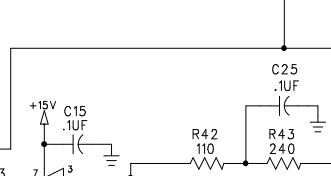
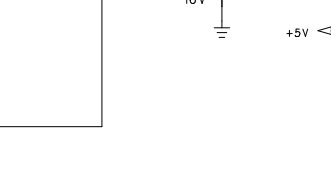
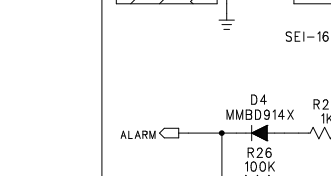
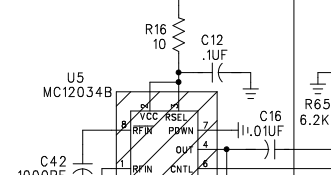
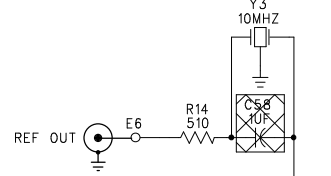
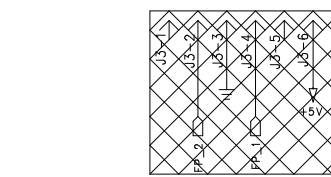
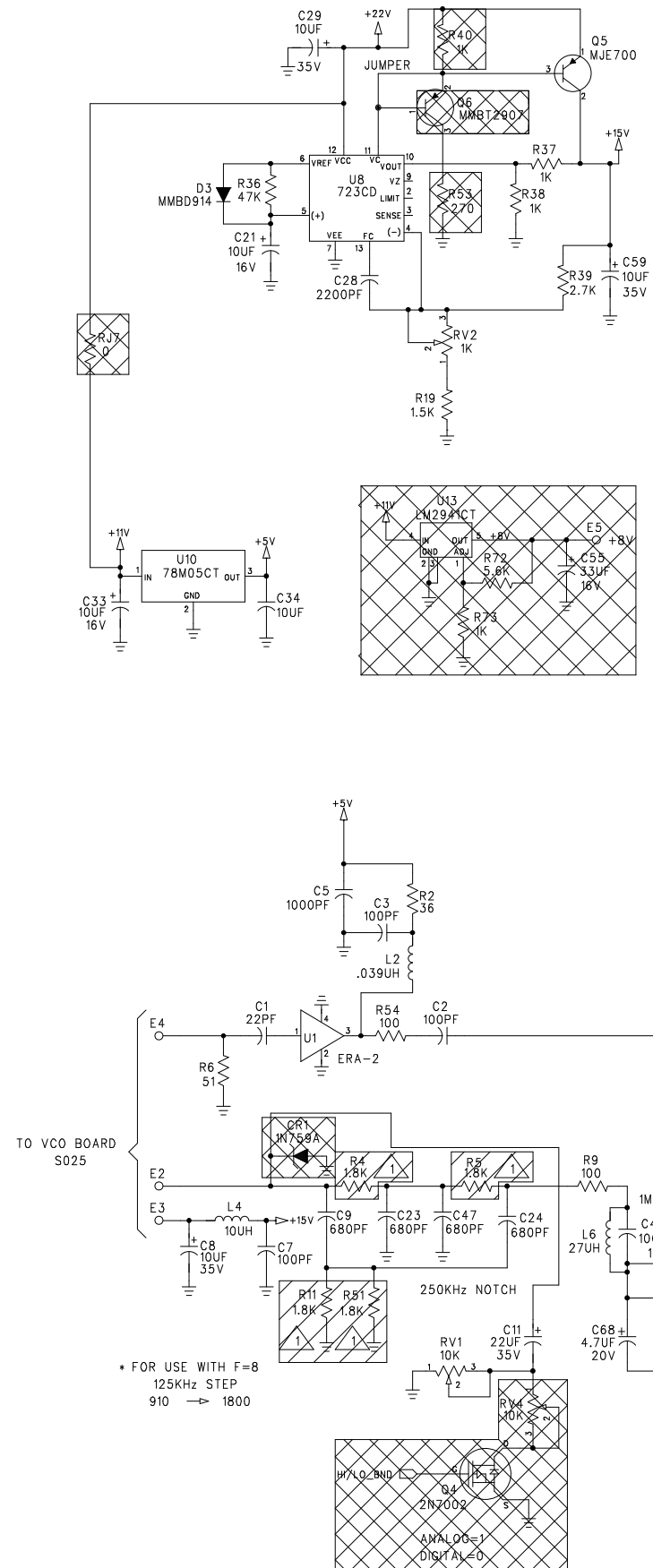
REVISION:	ECN NUMBER:	APPROVED:	DATE:
A1	REVISED RELEASE #563	JBP	1/28/01
B	REVISED RELEASE #563	JBP	6/11/01
c	ECN 010142	JBP	8/2/01
C1	REVISED	LMF	9/16/02

D

C

B

A

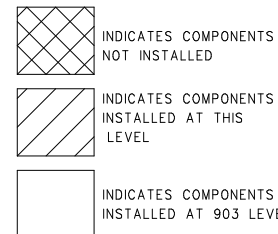
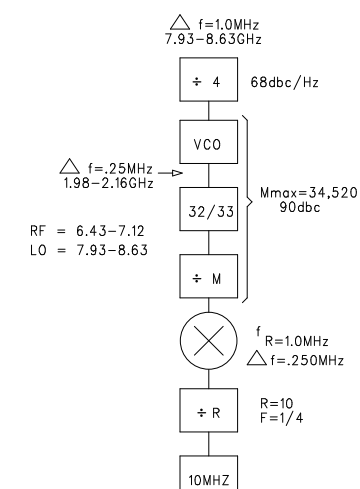


D

C

B

A



CONTRACT NO.:		INC. 101 BILBY ROAD BUILDING 2 HACKETTSTOWN, N.J. 07840	
DRAWN: WCB	DATED: 9/28/00	TITLE: SCHEMATIC	
CHECKED:	DATED:	MICROPROCESSOR CONTROL BD.	
ME:	DATED:	SYNTHESIZER	
EE: JBP	DATED: 6/14/01	SIZE: B	FSCM NO. ONG51
QC:	DATED:	DRAWING NO: SC902-S054-01CB	REV: C1
SCALE: NONE		FILE: S054C101.SCH	SHEET: 1 OF 1

4

3

2

1

ZONE	REV	REVISION DESCRIPTION	DATE	CHG BY	APPROVED
	D	SEE ECN #010187, NEW PCB ISSUED	09/17/01	JAG	JBP4
	D5	REVISED, ADDED DETAILS	09/03/02	RMM	LMF

HW1 4-40 X 5/16" PPHS
HW20 #4 SPLIT LOCK
HW30 #4-40 NUT

D

C

B

A

D

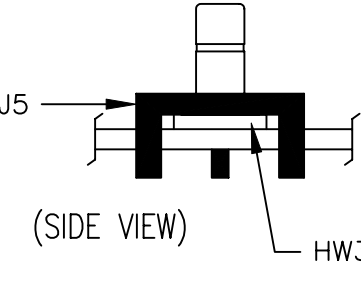
C

B

A

DATA CHANNEL

INSTALL INSULATED SHOULDER WASHER (HW3)
UNDER 'J5'. INNER RIM OF WASHER SHOULD
TOUCH THE PC BOARD.



CUT #1

CLEAR SLEEVING
OVER LEADS.

THESE TRACES ARE IN THE
CENTER OF THE BACK SIDE
OF THE BOARD.

DETAIL "A"
(NOT TO SCALE)

INSTALL L12 LEADED
INDUCTOR INTO VIA
HOLES, FLUSH TO BOARD.

R99 IS STACKED
ABOVE R39, (300)

EN1 (SIDE VIEW)

(COMPONENT SHIELD SHOULD BE
SOLDERED AFTER PRE-TEST)

721-M035-00DA REV D

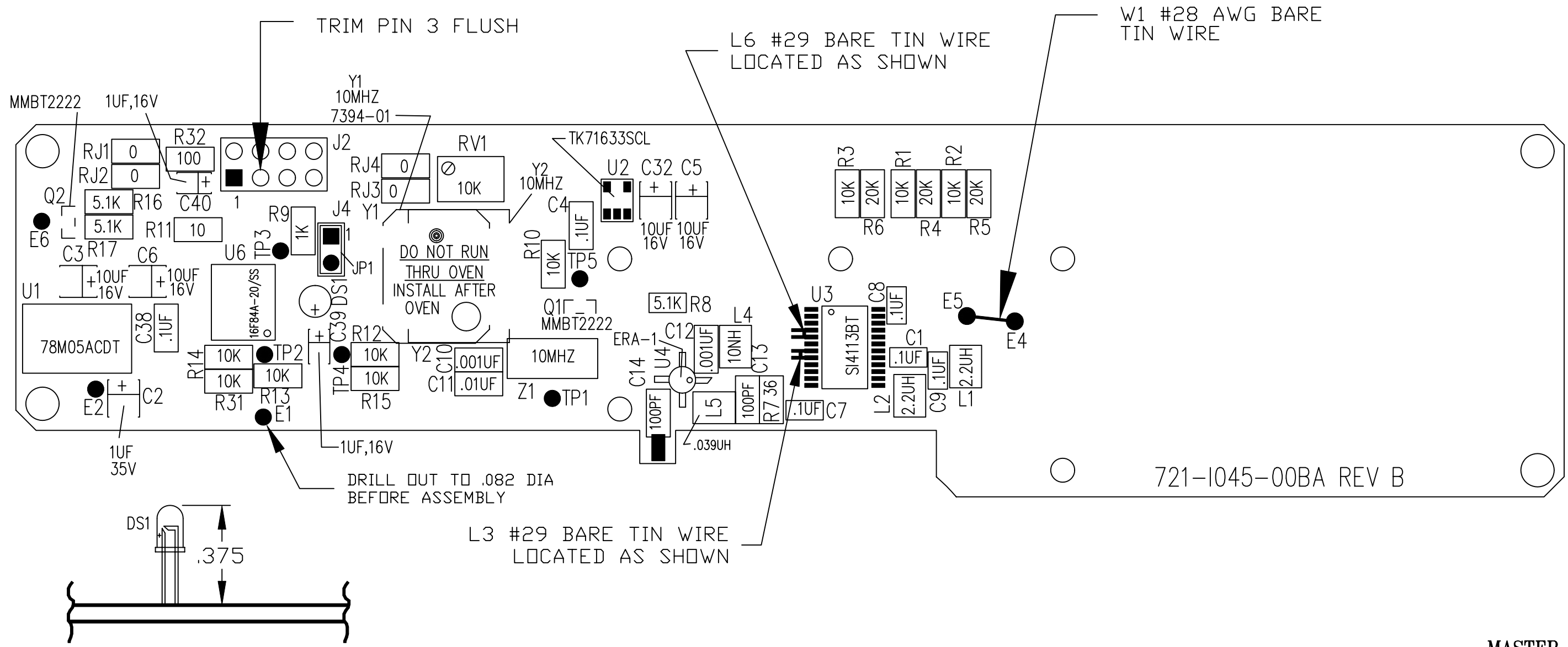
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DO NOT SCALE PRINT	APPLICATIONS		CONTRACT NO.:		 101 BILBY ROAD BUILDING 1 HACKETTSTOWN, N.J. - 07840			
	NEXT ASSY							
			DWN: WCB	DATE 01/19/01	ASSEMBLY, MODULATOR PCB, 70MHZ – MMPT6 CONTROL UNIT			
			CHK:					
			ME:					
			EE: JBP4	03/07/01				
	TOLERANCE ON		QC:		SIZE B	FSCM NO. 0NG51	DWG NO. AS902-M035-00DB	REV D5
	ANGLES .XX .XXX				SCALE: 1/1		FILE #: M035D501.DWG	SHEET 1 OF 1
	0°-15' ±.01 ±.005							
	MACHINE SURFACE EXCEPT AS NOTED	64	✓					
SCHEMATIC								

3

2

1

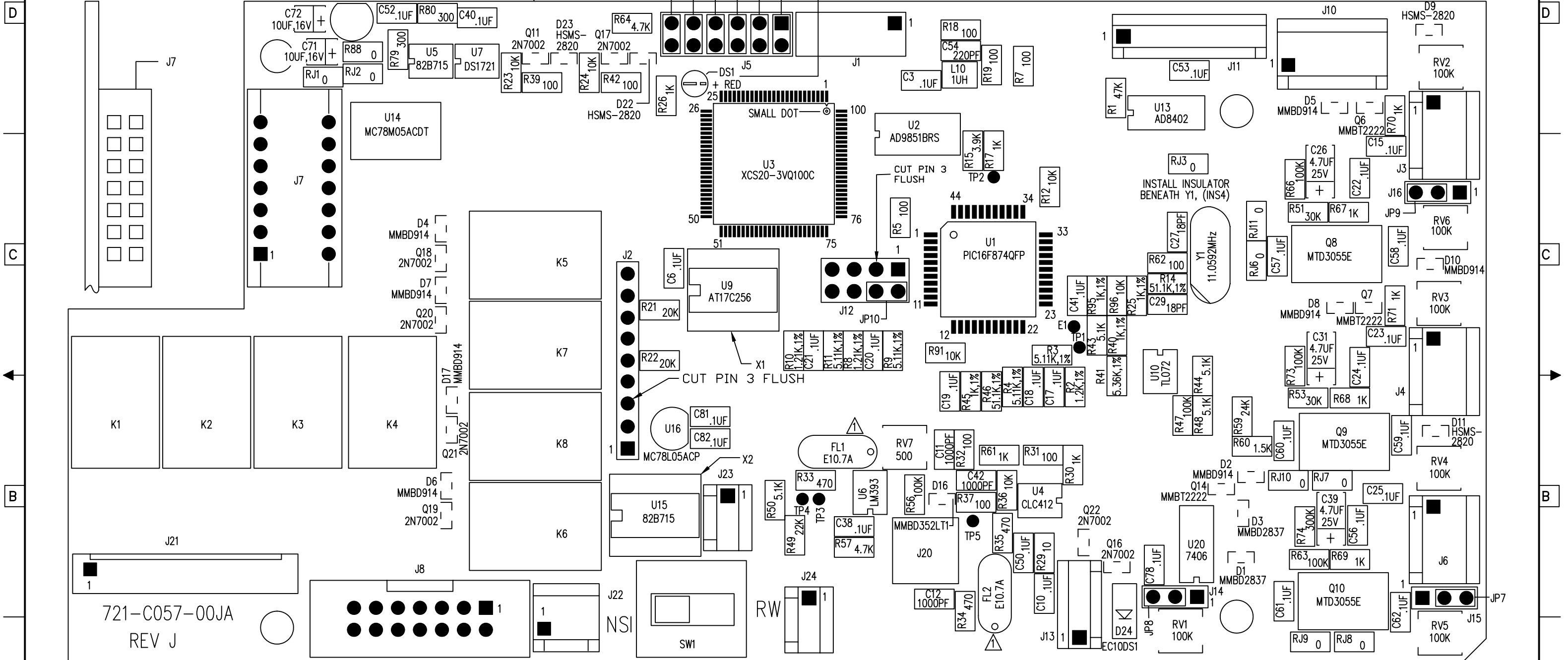
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	B	REVISED INITIAL RELEASE #578	1/23/01	WCB	JBP
	B2	UPDATED FROM MARKED UP BLUES	7/19/01	WCB	JBP



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DO NOT SCALE PRINT			APPLICATIONS		CONTRACT NO.:		 101 BILBY ROAD BUILDING 1 HACKETTSTOWN, N.J. - 07840			
			NEXT ASSY							
TOLERANCE ON			DWN: WCB		DATE 11/2/00		LOW NOISE 2ND L. O. SYNTHESIZER 1500MHz			
ANGLES .XX .XXX			CHK:							
0°-15' ±.01 ±.005			ME:							
MACHINE SURFACE EXCEPT AS NOTED 64 ✓			EE: JBP		2/1/01					
SCHEMATIC			QC:				SIZE B	FSCM NO. 0NG51	DWG NO. AS902-I045-00BB	REV B2
							SCALE: 1/1		FILE #: I045B201.DWG	SHEET 1 OF 1

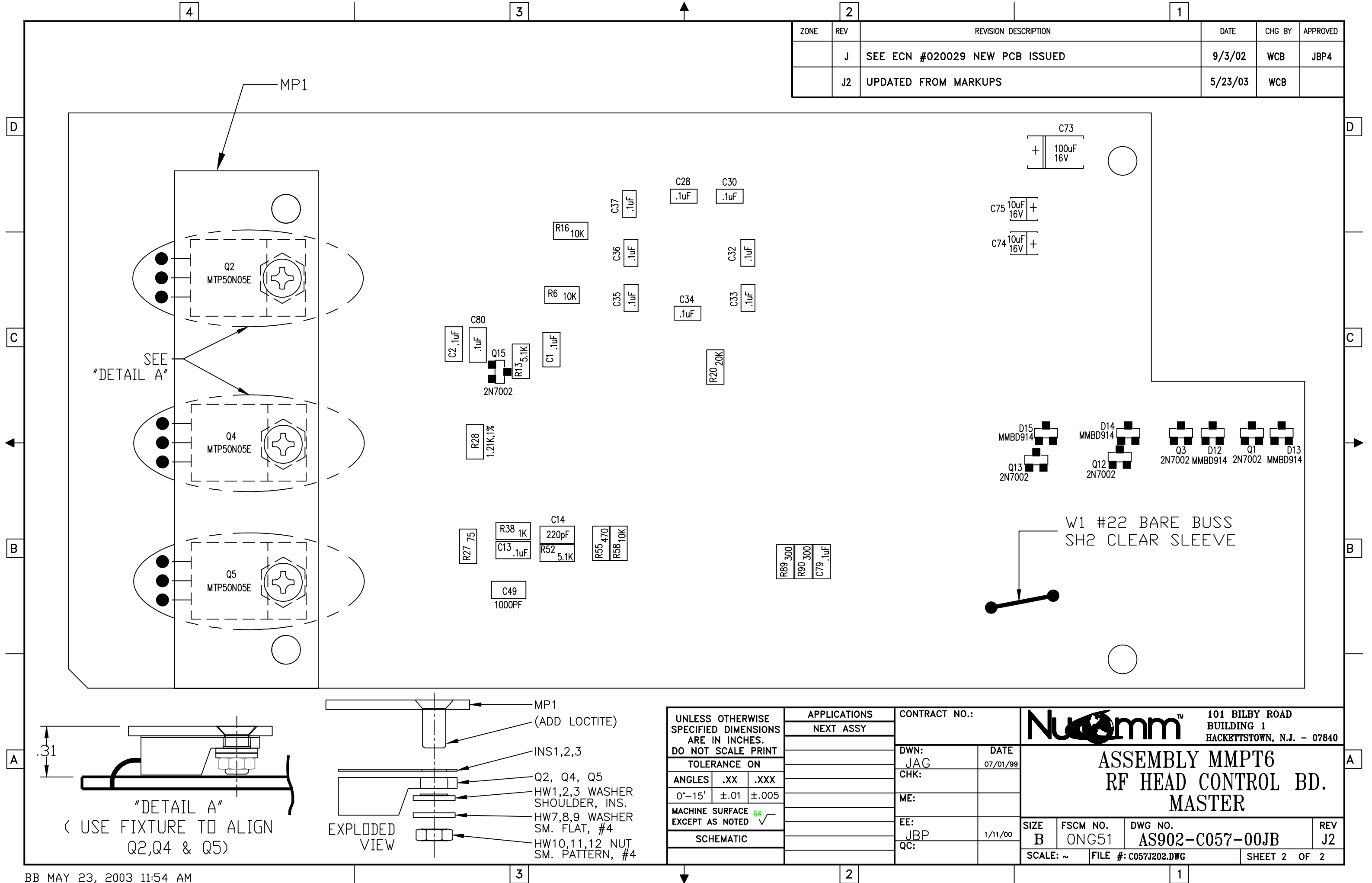
JP1- TEST PATTERN 1010 PATTERN

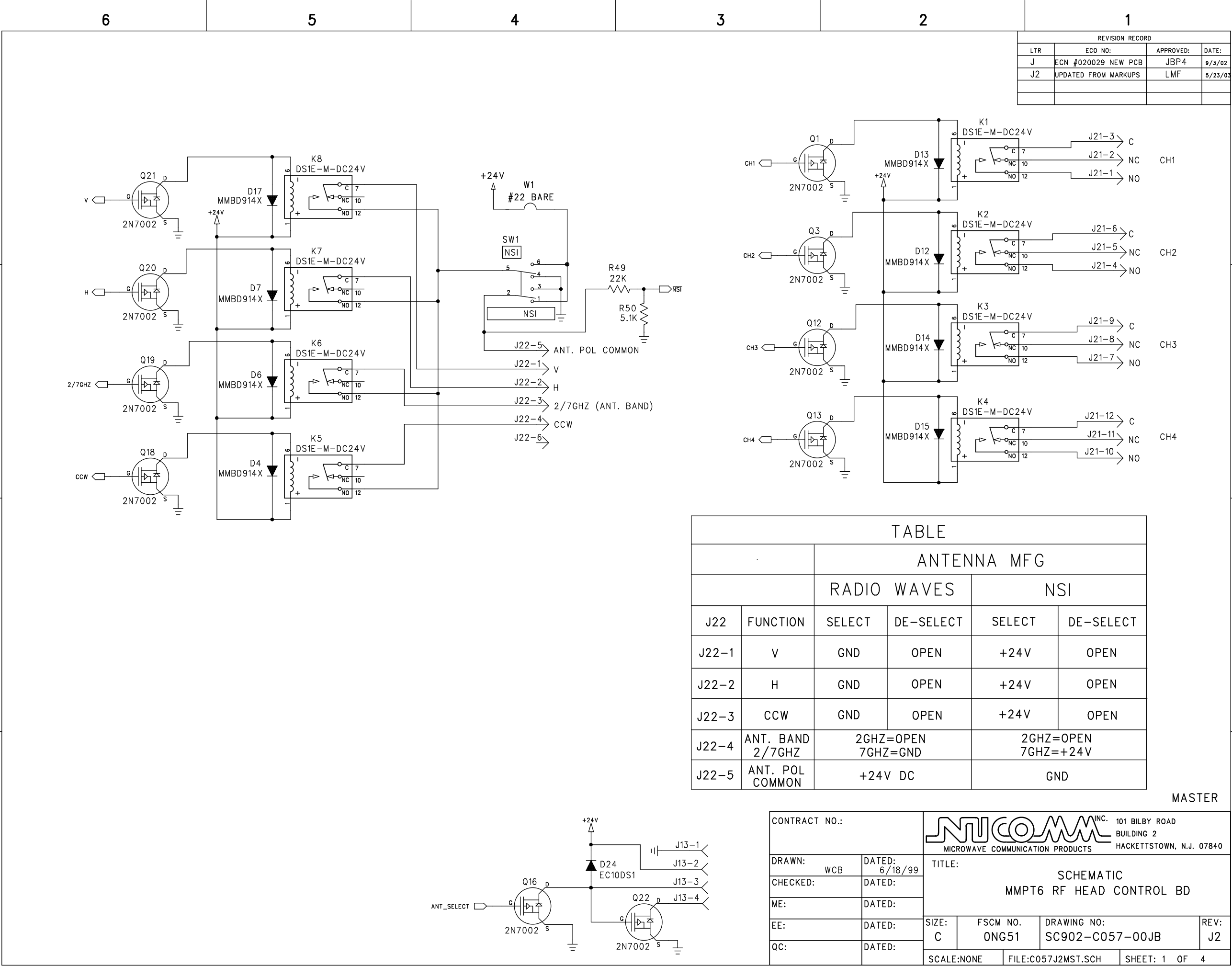
ZONE	REV	REVISION DESCRIPTION	DATE	CHG BY	APPROVED
	J	SEE ECN #020029 NEW PCB ISSUED	9/3/02	WCB	JBP4
	J2	UPDATED FROM MARKUPS	5/23/03	WCB	



△ FL1 & FL2 MUST BE MARKED E10.7A

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DO NOT SCALE PRINT TOLERANCE ON ANGLES .XX .XXX 0°-15' ±.01 ±.005 MACHINE SURFACE EXCEPT AS NOTED 64 ✓ SCHEMATIC 	APPLICATIONS		CONTRACT NO.:		Nucomm™ 101 BILBY ROAD BUILDING 1 HACKETTSTOWN, N.J. - 07840				
	NEXT ASSY								
			DWN: JAG	DATE 07/01/99	ASSEMBLY MMPT6 RF HEAD CONTROL BD. MASTER				
			CHK:						
			ME:						
			EE: JBP	1/11/00					
			QC:		SIZE B	FSCM NO. ONG51	DWG NO. AS902-C057-00JB	REV J2	
					SCALE: 1=1 FILE #: C057J201.DWG			SHEET 1 OF 2	





Q1

2N7002

G

S

D

D13

MMBD914X

+

-

K1

DS1E-M-DC24V

1

6

7

10

12

Q3

2N7002

G

S

D

D12

MMBD914X

+

-

K2

DS1E-M-DC24V

1

6

7

10

12

Q12

2N7002

G

S

D

D14

MMBD914X

+

-

K3

DS1E-M-DC24V

1

6

7

10

12

Q13

2N7002

G

S

D

D15

MMBD914X

+

-

K4

DS1E-M-DC24V

1

6

7

10

12

Q16

2N7002

G

S

D

D24

EC10DS1

+

-

Q22

2N7002

G

S

D

W1

#22 BARE

5

6

4

3

2

1

SW1

NSI

5

4

3

2

1

R49

22K

+

-

R50

5.1K

+

-

J22-5

ANT. POL COMMON

J22-1

V

J22-2

H

J22-3

2/7GHZ (ANT. BAND)

J22-4

CCW

J22-6

CH1

CH2

CH3

CH4

J21-3

C

J21-2

NC

J21-1

NO

J21-6

C

J21-5

NC

J21-4

NO

J21-9

C

J21-8

NC

J21-7

NO

J21-12

C

J21-11

NC

J21-10

NO

J22

FUNCTION

SELECT

DE-SELECT

SELECT

DE-SELECT

J22-1

V

GND

OPEN

+24V

OPEN

J22-2

H

GND

OPEN

+24V

OPEN

J22-3

CCW

GND

OPEN

+24V

OPEN

J22-4

ANT. BAND
2/7GHZ

2GHZ=OPEN
7GHZ=GND

2GHZ=OPEN
7GHZ=+24V

J22-5

ANT. POL
COMMON

+24V DC

GND

TABLE

ANTENNA MFG

RADIO WAVES

NSI

CONTRACT NO.:

INC.

101 BILBY ROAD

BUILDING 2

HACKETTSTOWN, N.J. 07840

DRAWN:

WCB

DATED:

6/18/99

TITLE:

SCHEMATIC

MMPT6 RF HEAD CONTROL BD

CHECKED:

DATED:

SIZE:

C

FSCM NO.

ONG51

DRAWING NO:

SC902-C057-00JB

REV:

J2

ME:

DATED:

SCALE:NONE

FILE:C057J2MST.SCH

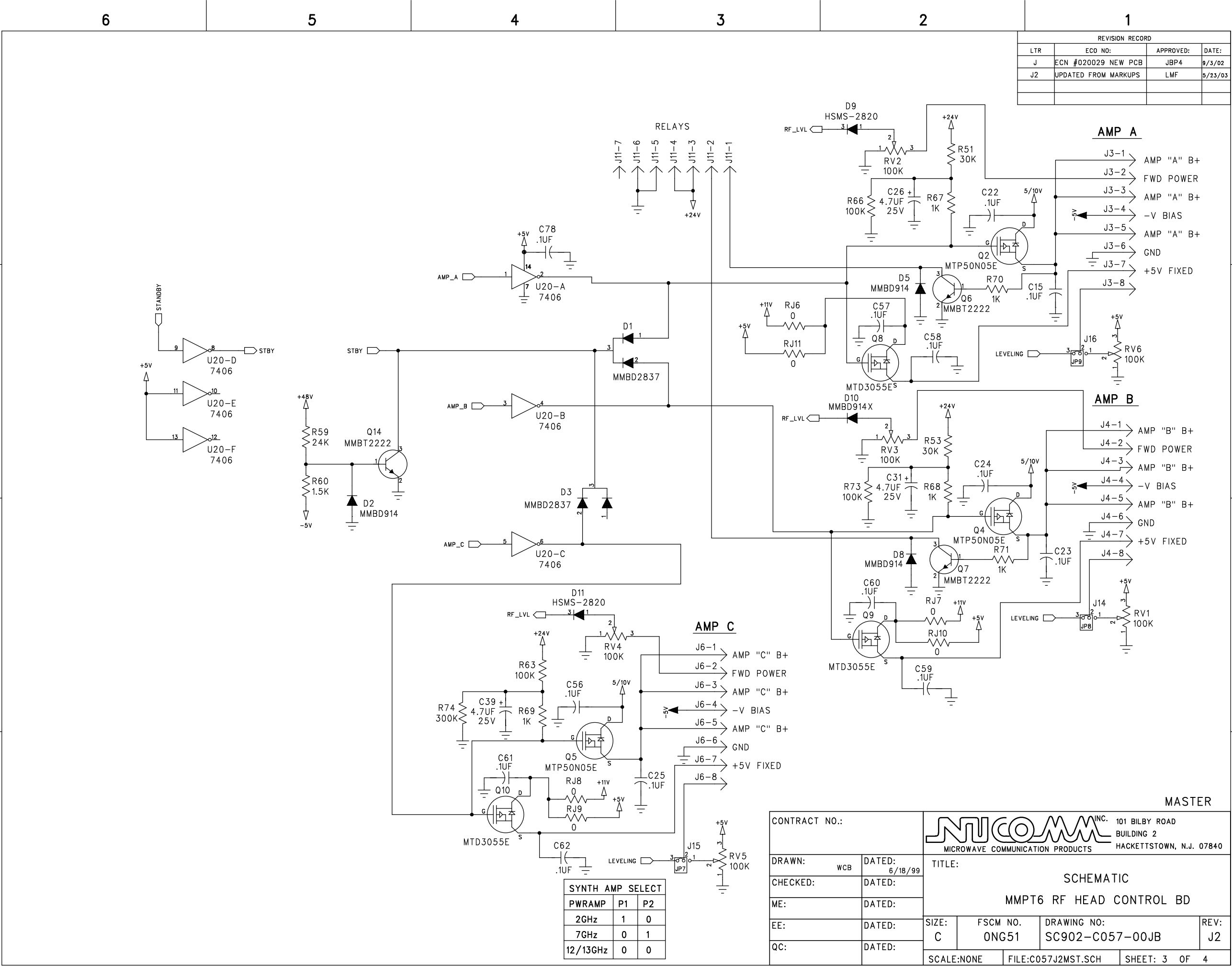
SHEET: 1 OF 4

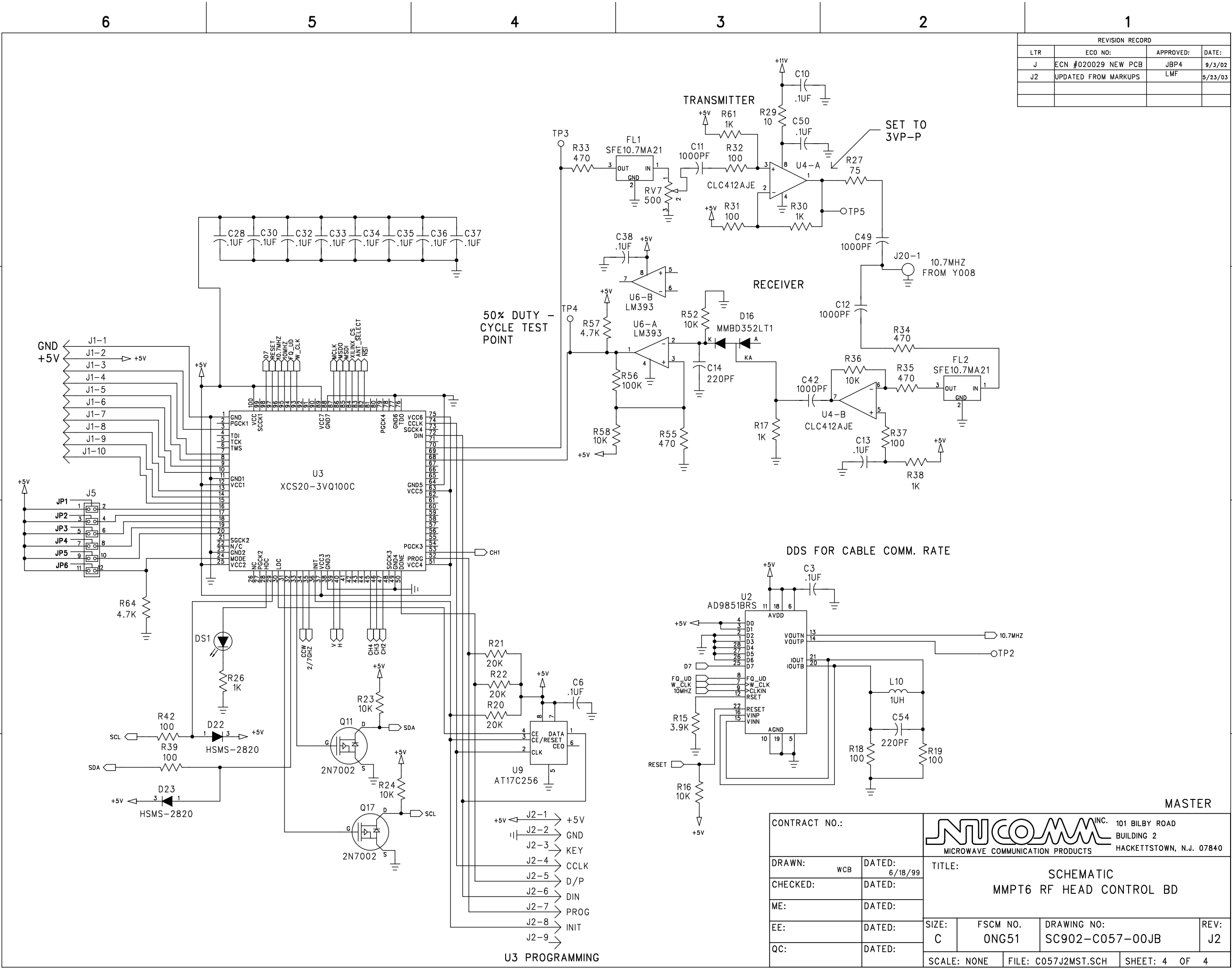
EE:

DATED:

QC:

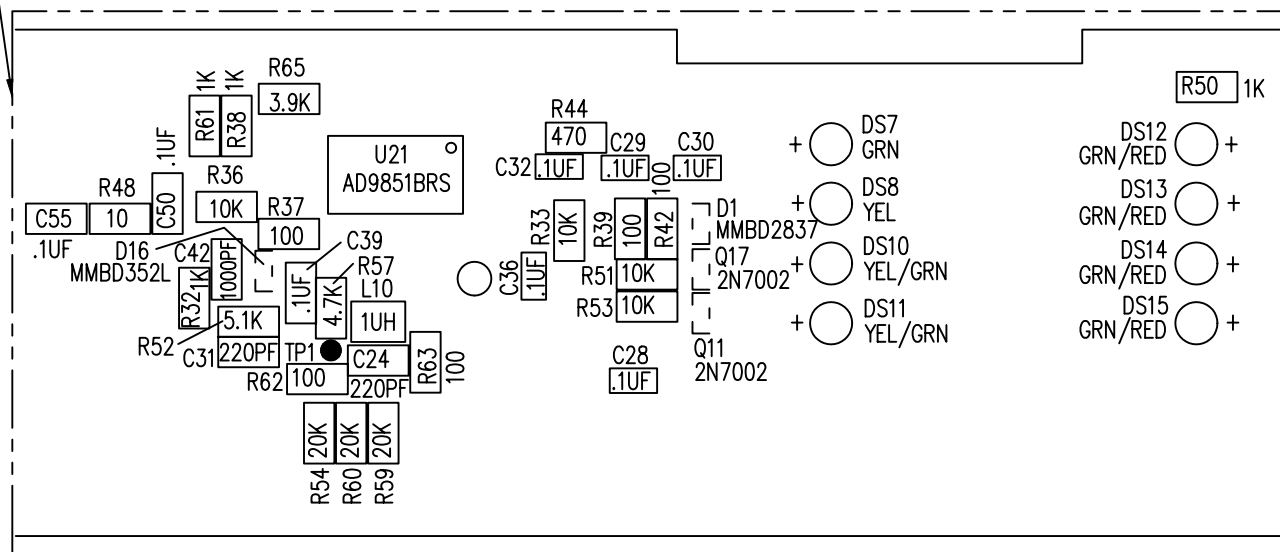
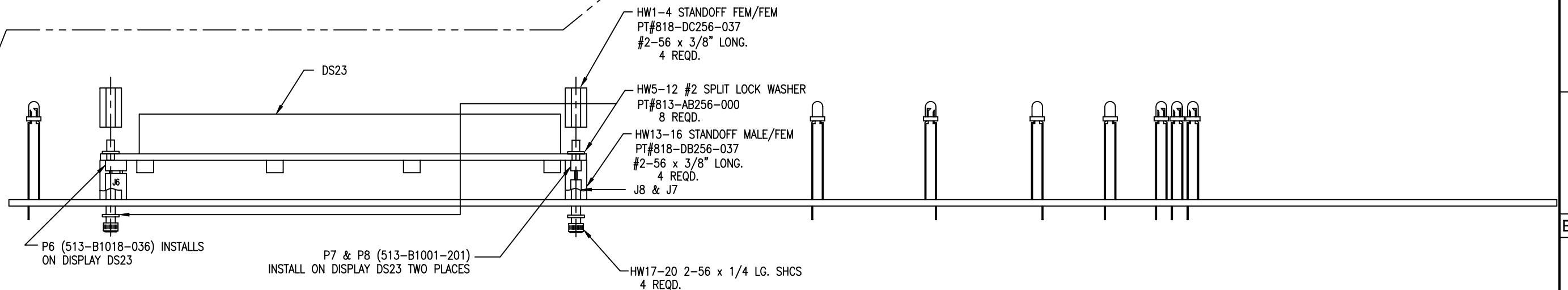
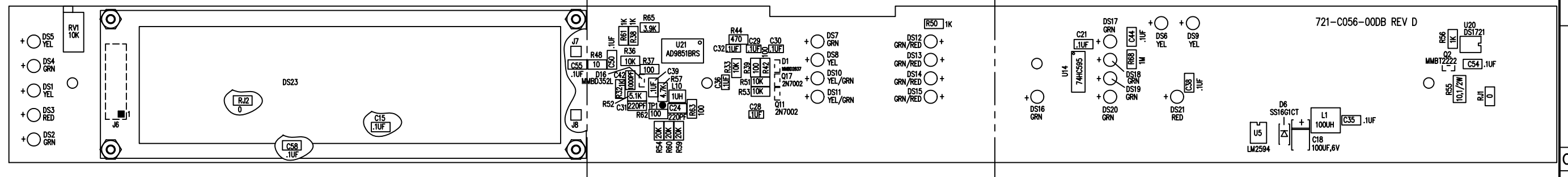
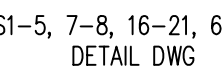
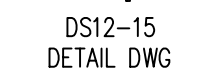
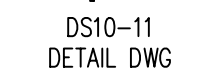
DATED:





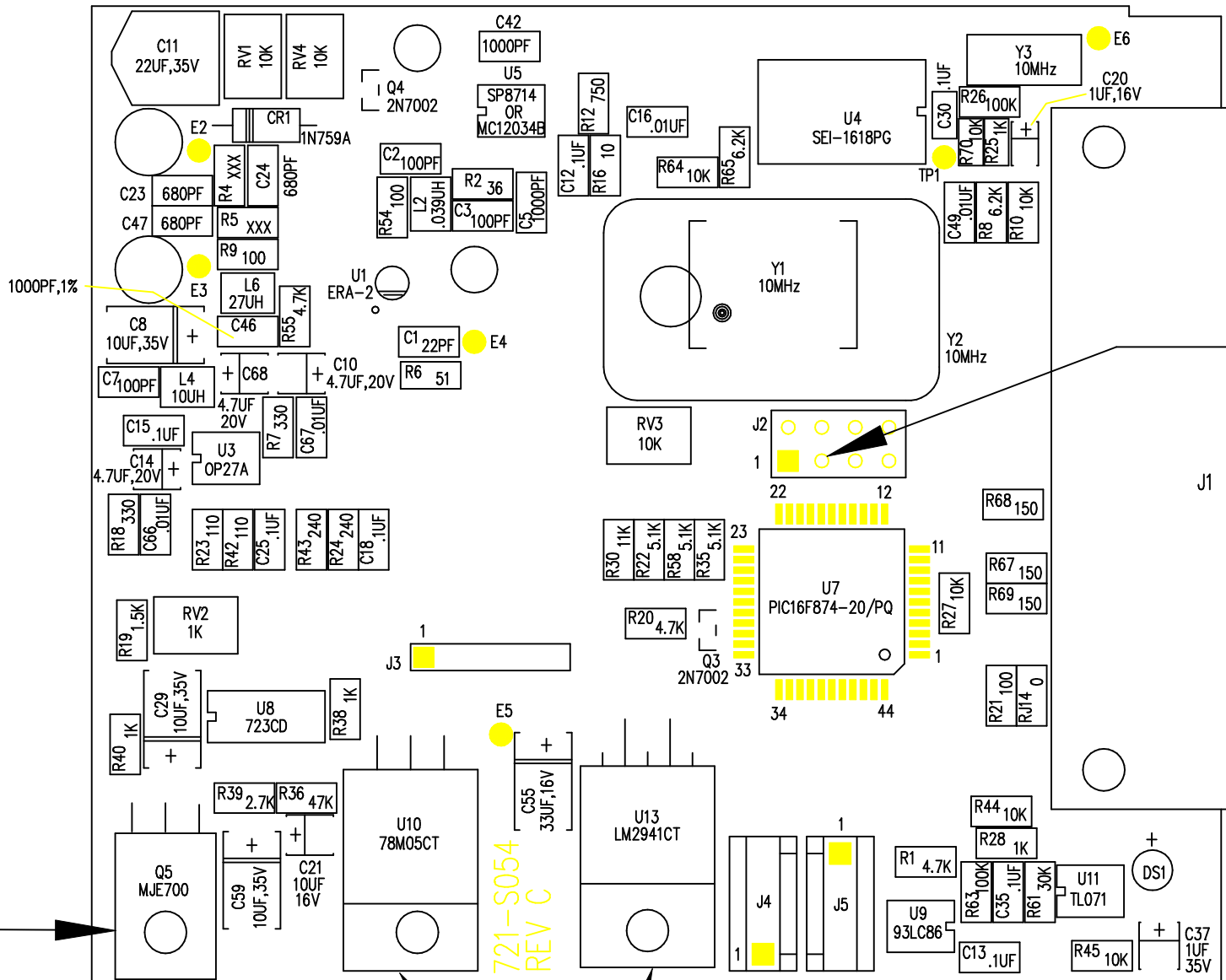
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	D	SEE ECN #010108 NEW PCB ISSUED	01/08/02	JAG	JBP4
	D1	MARK UP (NOTE CHANGES SHEET 1)	09/28/02	LAC	LAC

ALL LEDS WILL BE INSTALLED
AT 901 LEVEL.



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DO NOT SCALE PRINT			APPLICATIONS		CONTRACT NO.:		 101 BILBY ROAD BUILDING 1 HACKETTSTOWN, N.J. - 07840	
			NEXT ASSY					
TOLERANCE ON			DWN: P.L.		DATE		ASSEMBLY LCD MMPT6 CONTROL BOARD	
ANGLES .XX .XXX			CHK:		3/22/99			
0°-15' ±.01 ±.005			ME:					
MACHINE SURFACE EXCEPT AS NOTED 64 ✓			EE:					
SCHEMATIC			JBP4		3/30/00		SIZE B FSCM NO. 0NG51 DWG NO. AS902-C056-00DB REV D1	
			QC:				SCALE: 1X FILE #: C056D001.DWG SHEET 1 OF 2	

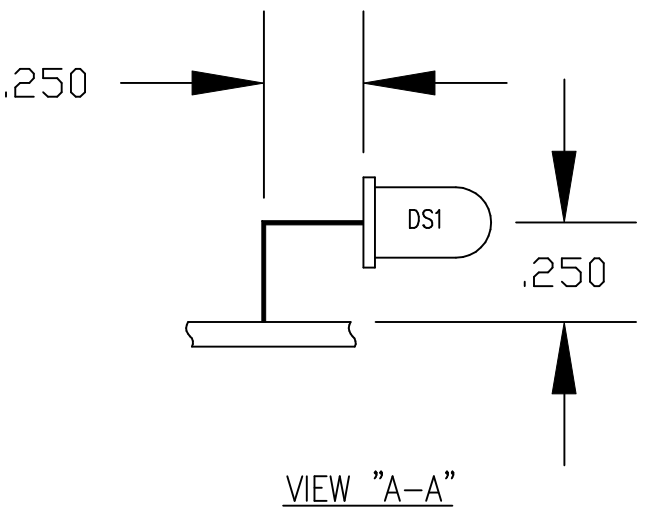
ZONE	REV	REVISION DESCRIPTION	DATE	CHG BY	APPROVED
	C	SEE ECN #010142 NEW PCB ISSUED	8/13/01	WCB	JBP
	C1	REVISED	09/23/02	RMM	LMF



CUT PIN 3 FLUSH

INSULATOR UNDER Q5 INSTALLED
AT 901 LEVEL

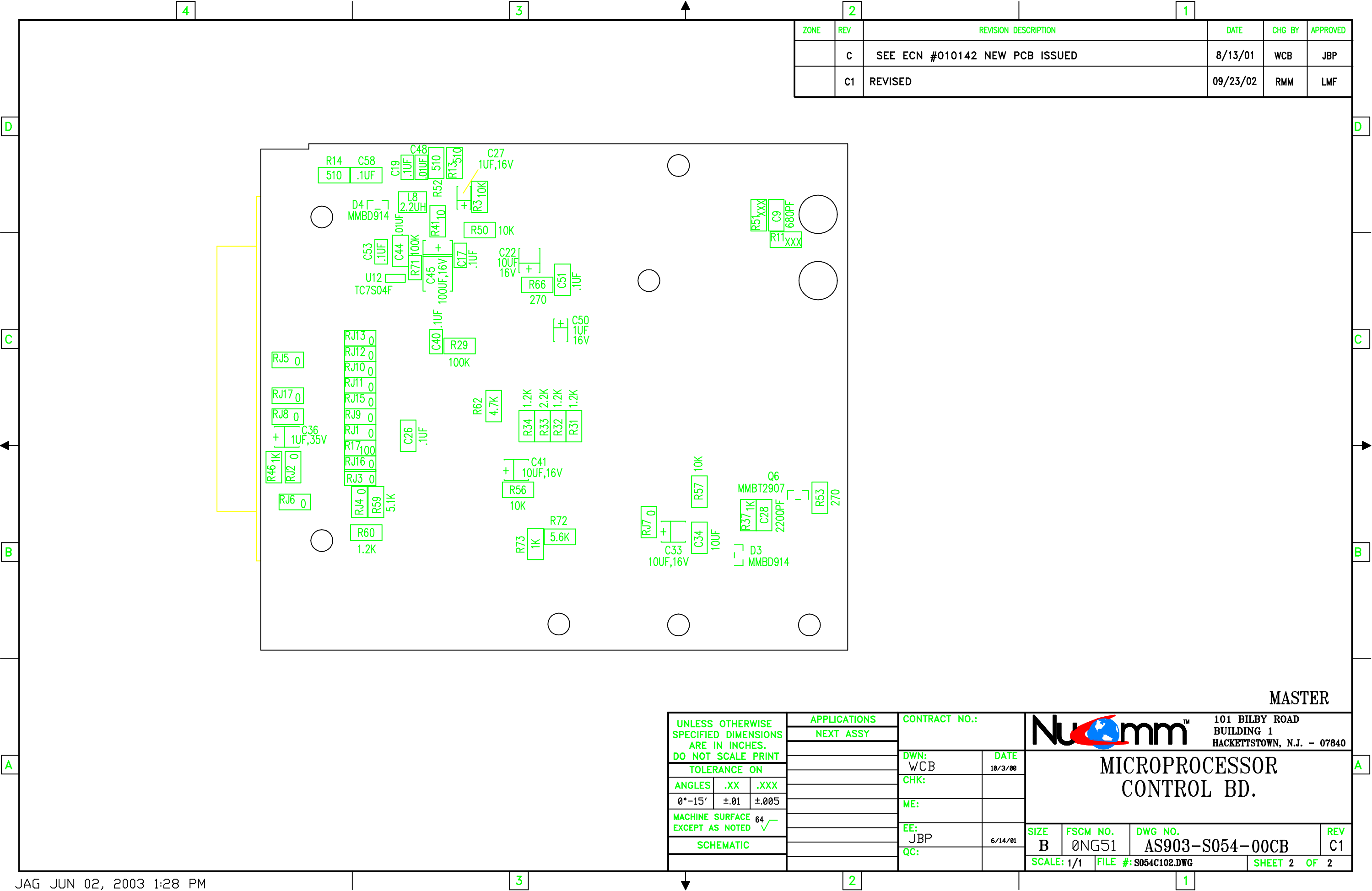
METAL SIDE DOWN
ALIGN HOLE IN DEVICE WITH
HOLE IN PCB & ADD HEATSINK
COMPOUND BETWEEN U10, & PCB ONLY



VIEW "A-A"

MASTER

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DO NOT SCALE PRINT TOLERANCE ON ANGLES .XX .XXX 0°-15' ±.01 ±.005 MACHINE SURFACE 64 EXCEPT AS NOTED ✓ SCHEMATIC 	APPLICATIONS		CONTRACT NO.:		 101 BILBY ROAD BUILDING 1 HACKETTSTOWN, N.J. - 07840		
	NEXT ASSY						
		DWN: WCB	DATE 10/3/00	MICROPROCESSOR CONTROL BOARD			
		CHK:					
		ME:					
		EE: JBP	6/14/01				
		QC:		SIZE B	FSCM NO. 0NG51	DWG NO. AS903-S054-00CB	REV C1
				SCALE: 1/1		FILE #: S054C101.DWG	SHEET 1 OF 2



6

5

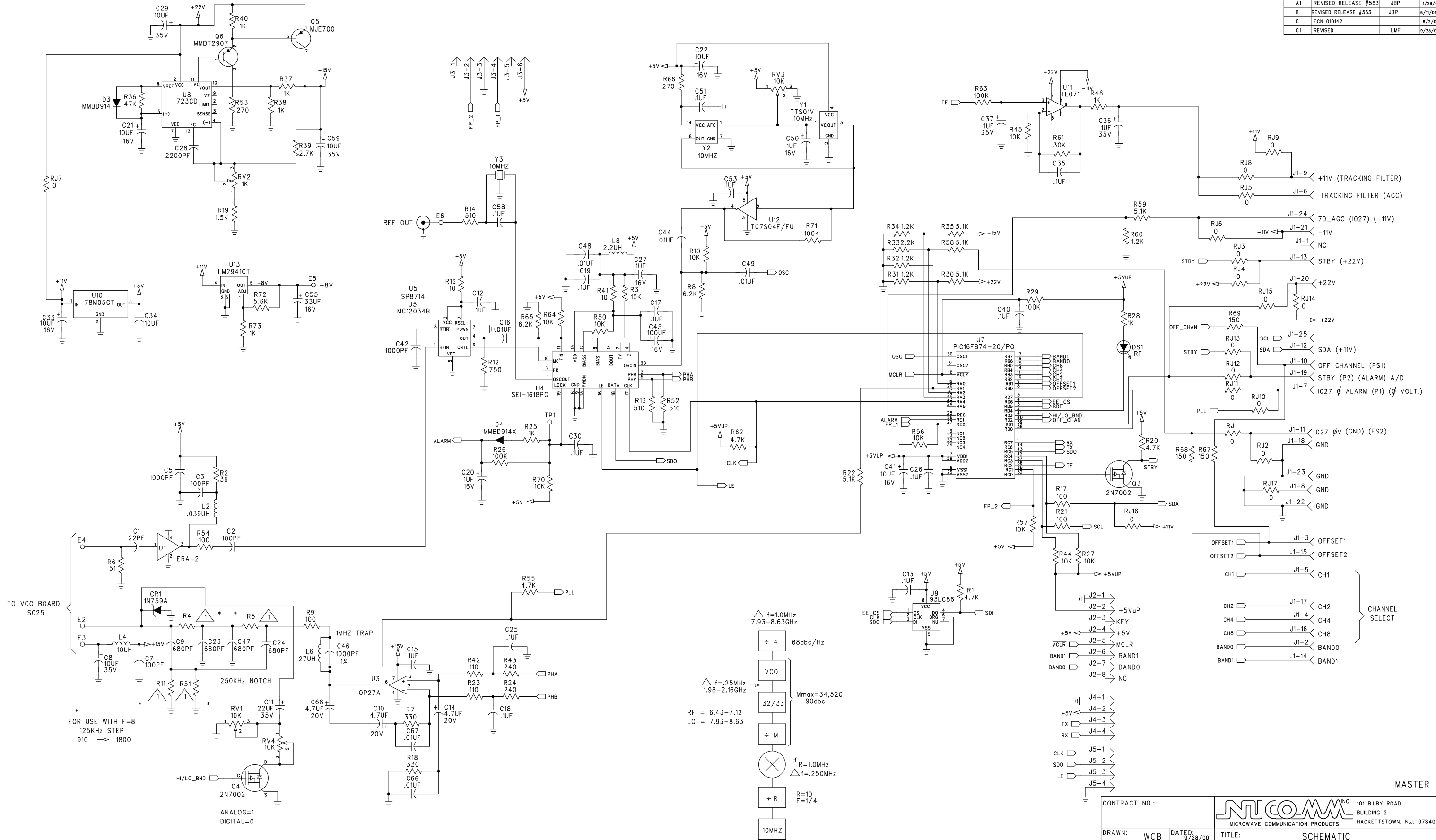
4

3

2

1

REVISION RECORD			
REVISION:	ECN NUMBER:	APPROVED:	DATE:
A1	REVISED RELEASE #563	JBP	1/28/01
B	REVISED RELEASE #563	JBP	6/11/01
C	ECN 010142		8/2/01
C1	REVISED	LMF	9/23/02



MASTER

CONTRACT NO.:		DRAWN: WCB		CHECKED: JBP		ME: JBP		EE: JBP		QC: JBP		DATE: 9/28/00		DATE: 6/14/01		DATE: 9/23/02	
TITLE: SCHEMATIC		TITLE: MICROPROCESSOR CONTROL BD.		TITLE: SYNTHESIZER		SIZE: B		FSCM NO. ONG51		DRAWING NO: SC903-S054-00CB		REV: C1		SCALE: NONE		FILE: S054C1MST.SCH	
101 BILBY ROAD		BUILDING 2		HACKETTSTOWN, N.J. 07840		SHEET: 1		OF		1							