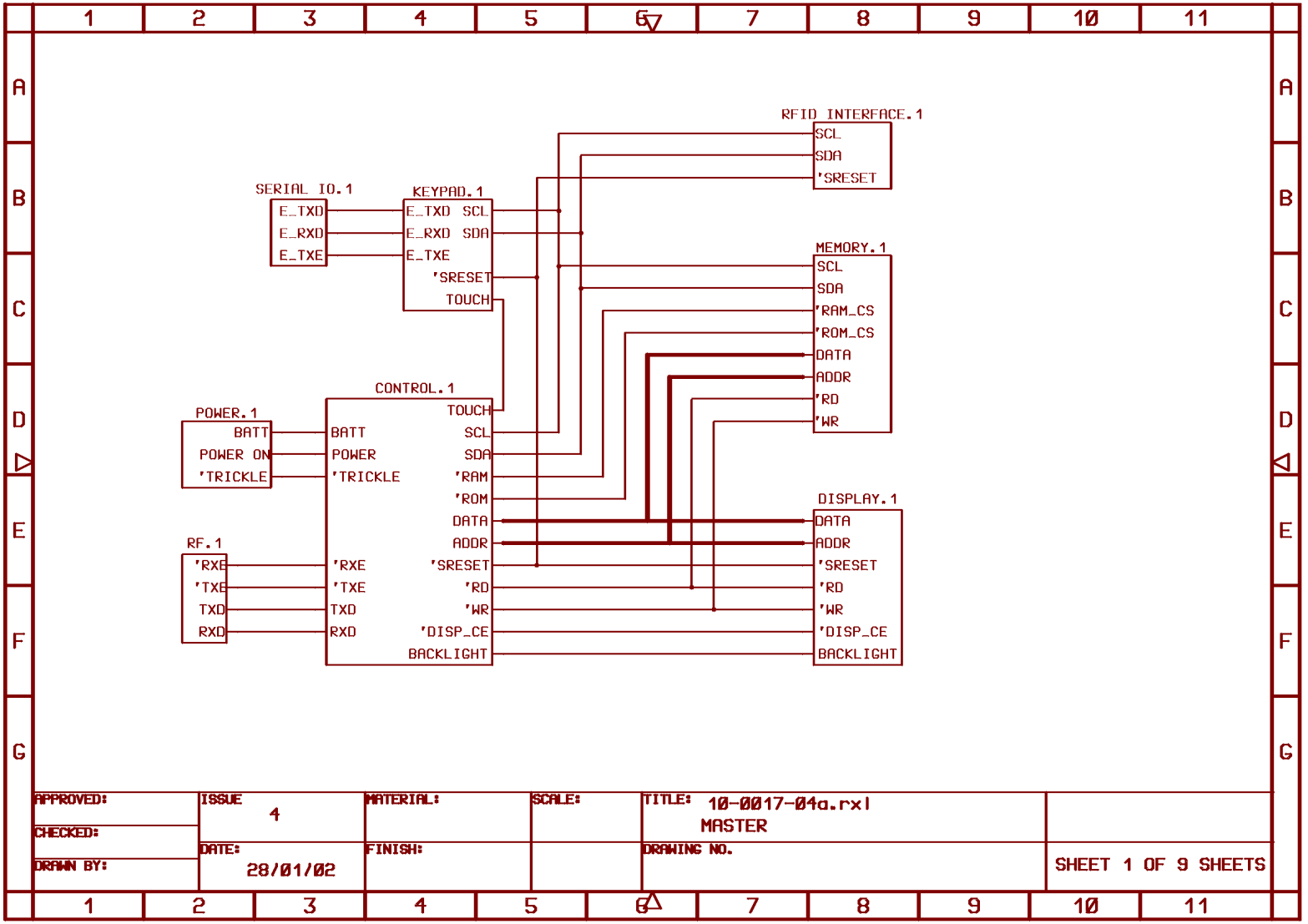
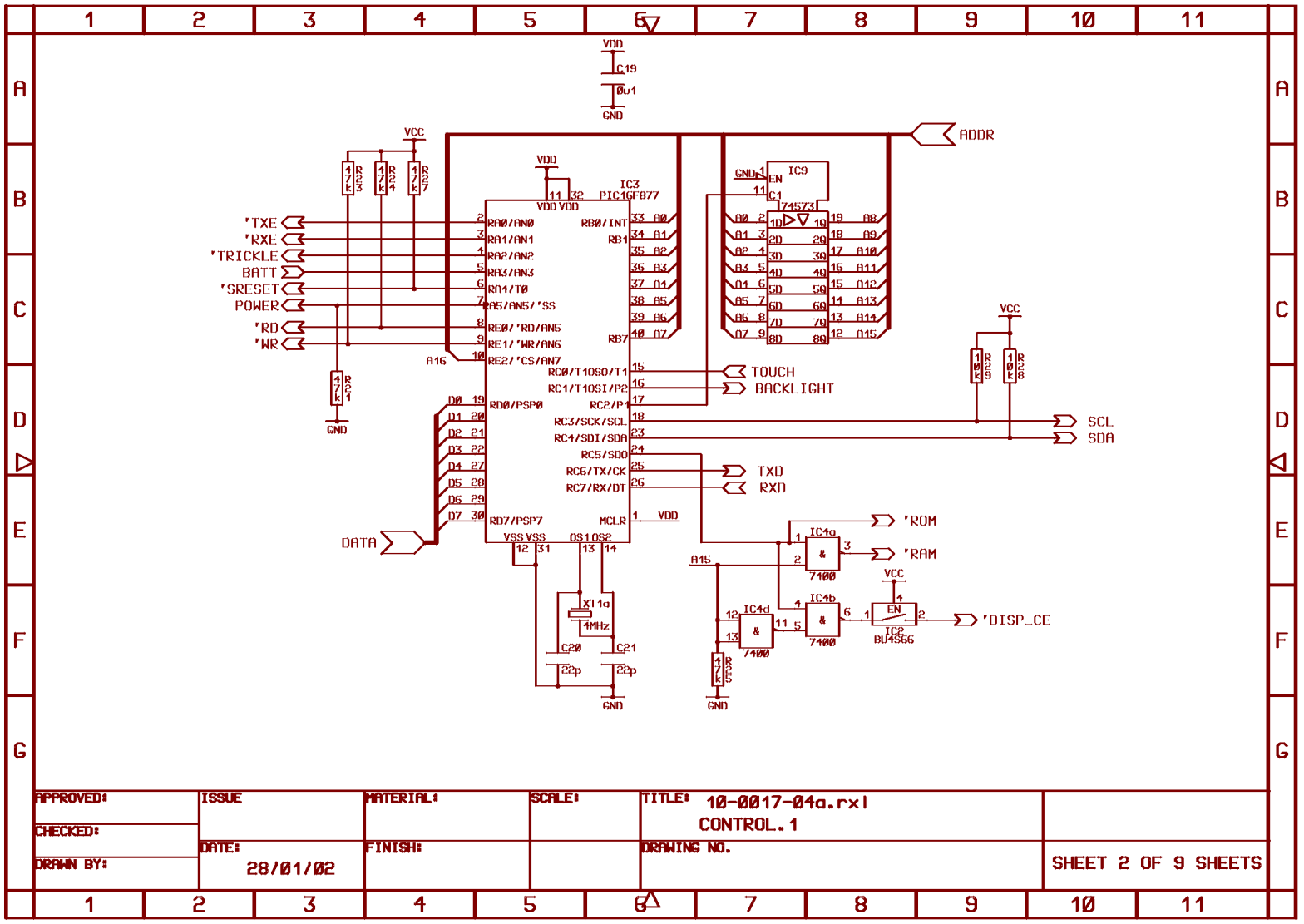
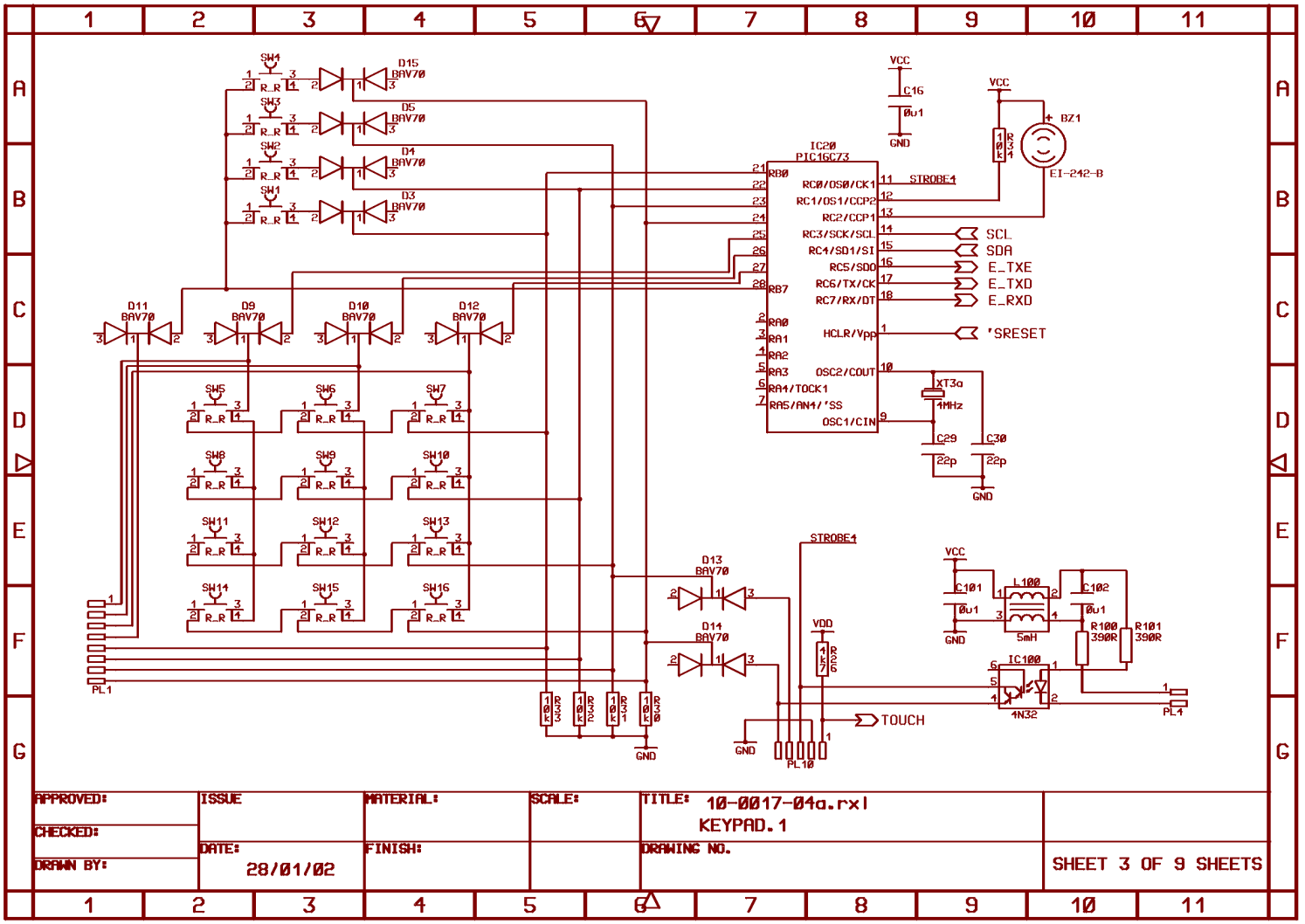
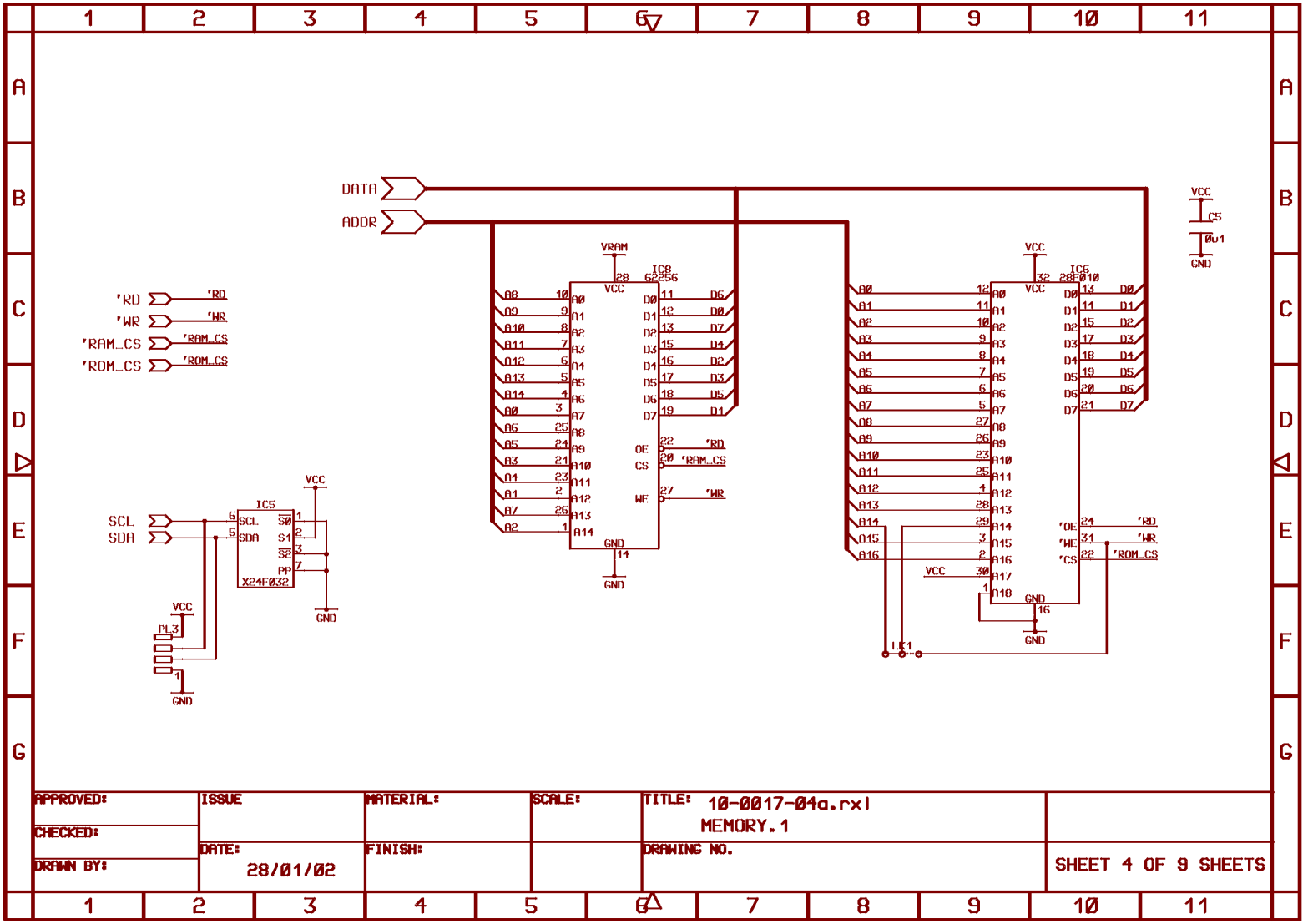
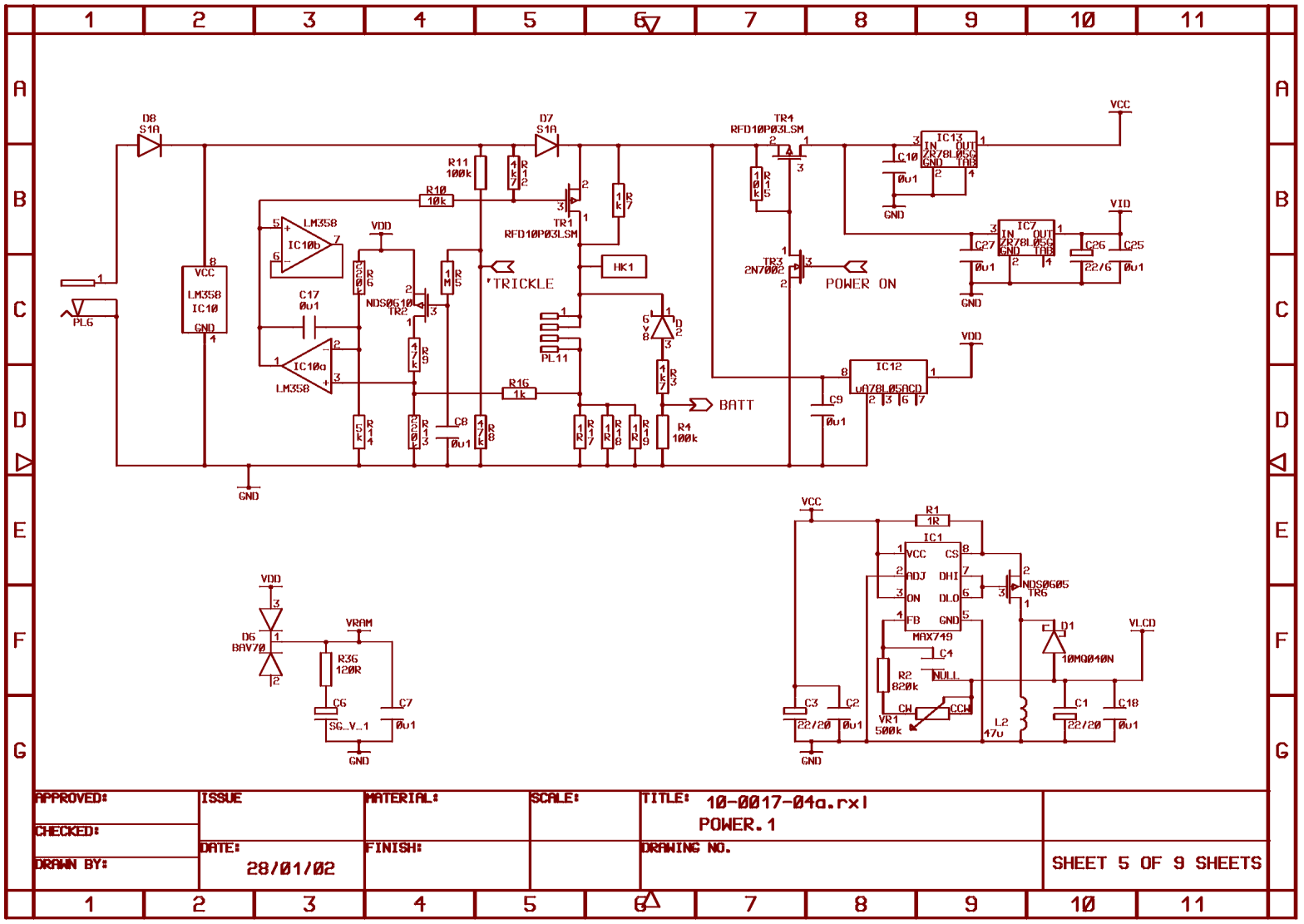
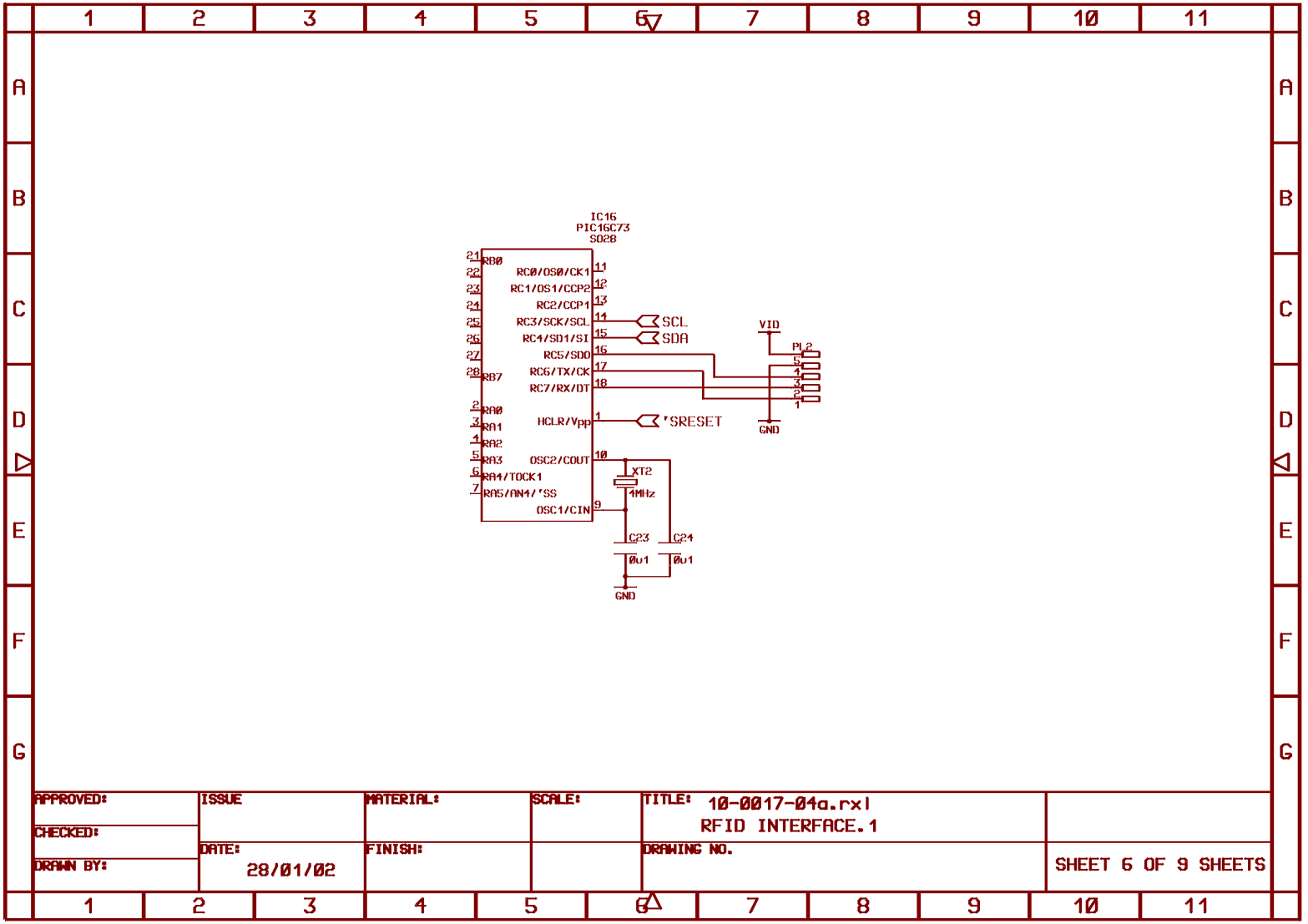

RFID_INTERFACE.1
SCL
SDA
'SRESET
SERIAL_IO.1
E_TXD
E_RXD
E_TXE
KEYPAD.1
E_TXD SCL
E_RXD SDA
E_TXE
'SRESET
TOUCH
MEMORY.1
SCL
SDA
'RAM_CS
'ROM_CS
DATA
ADDR
'RD
'WR
CONTROL.1
TOUCH
SCL
SDA
'RAM
'ROM
DATA
ADDR
'SRESET
'RD
'WR
'DISP_CE
BACKLIGHT
POWER.1
BATT
POWER ON
'TRICKLE
BATT
POWER
'TRICKLE
RF.1
'RXE
'TXE
TXD
RXD
'RXE
'TXE
TXD
RXD
DISPLAY.1
DATA
ADDR
'SRESET
'RD
'WR
'DISP_CE
BACKLIGHT
APPROVED:
CHECKED:
DRAWN BY:
ISSUE
4
DATE:
28/01/02
MATERIAL:
FINISH:
SCALE:
TITLE:
10-0017-04a.rxl
MASTER
DRAWING NO.
SHEET 1 OF 9 SHEETS

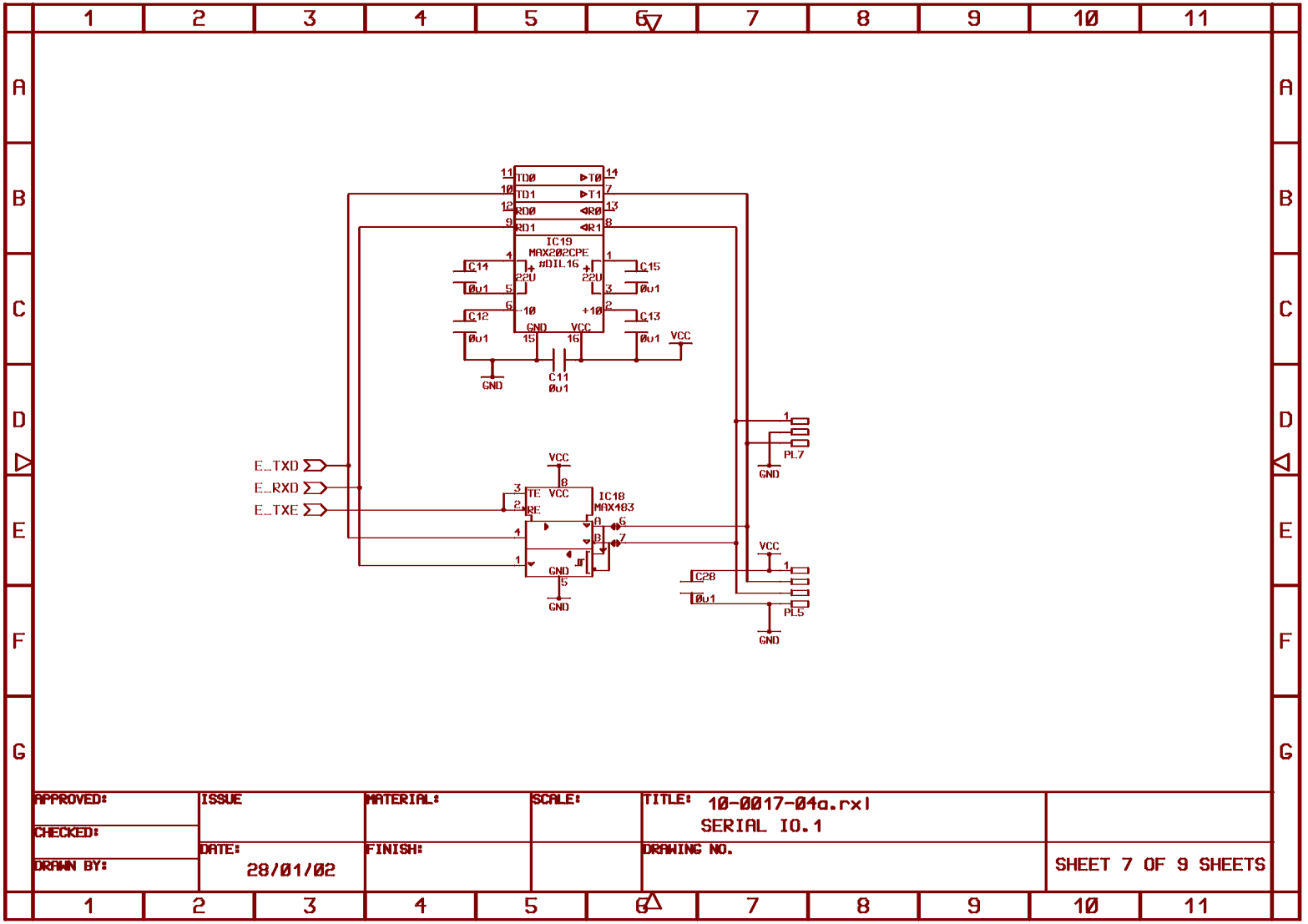

VDD
C19
0u1
GND
VCC
ADDR
IC3
PIC16F877
IC9
74573
'TXE
'RXE
'TRICKLE
BATT
'SRESET
POWER
'RD
'WR
A16
TOUCH
BACKLIGHT
SCL
SDA
TXD
RXD
DATA
'ROM
'RAM
'DISP_CE
A15
IC4a
IC4b
IC4d
7400
BU4066
XT1a
4MHz
C20
C21
22p
APPROVED:
CHECKED:
DRAWN BY:
ISSUE
DATE:
28/01/02
MATERIAL:
FINISH:
SCALE:
TITLE:
10-0017-04a.rxl
CONTROL.1
DRAWING NO.
SHEET 2 OF 9 SHEETS

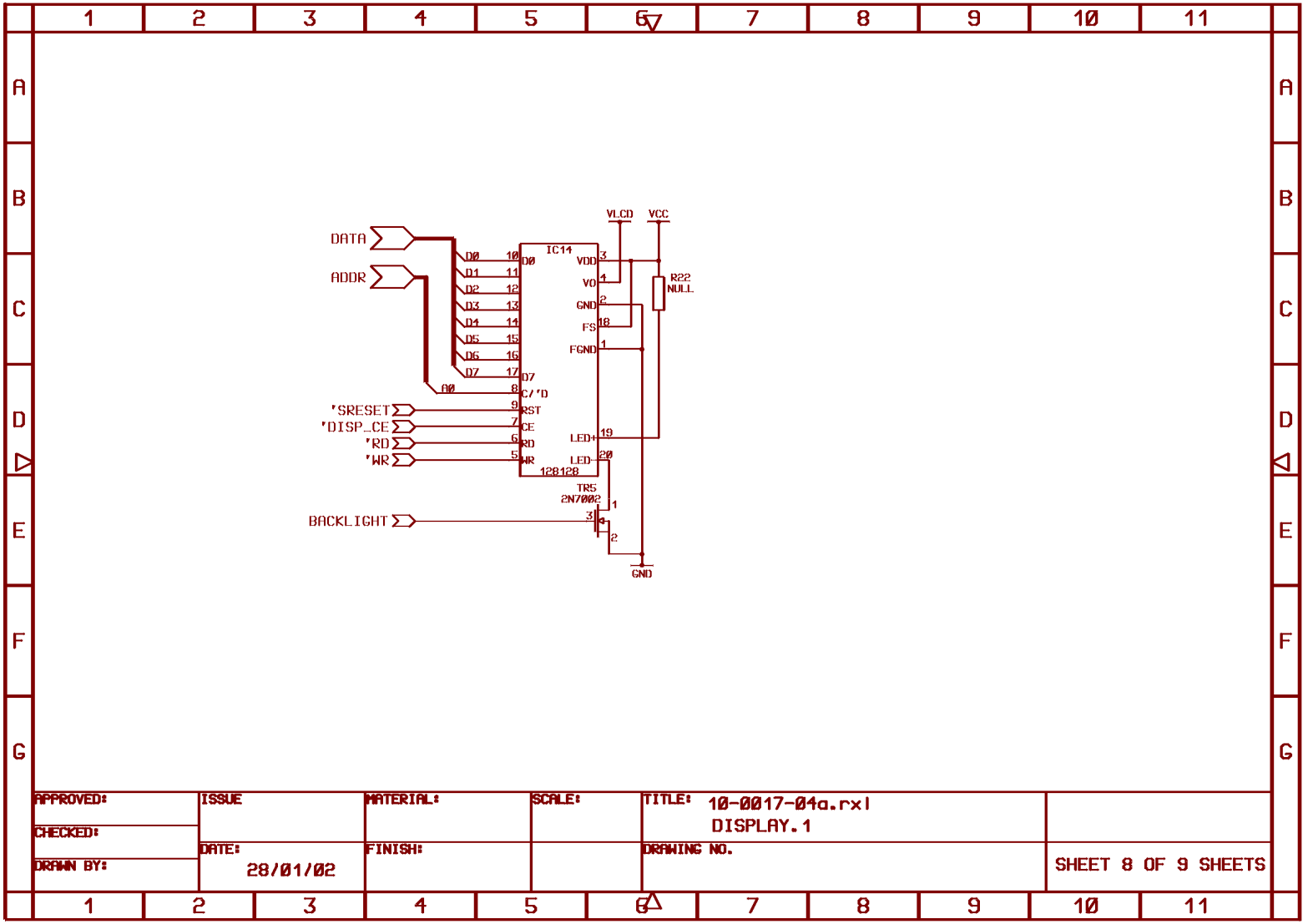

SW4
D15
BAV70
SW3
D5
BAV70
SW2
D4
BAV70
SW1
D3
BAV70
D11
BAV70
D9
BAV70
D10
BAV70
D12
BAV70
SW5
SW6
SW7
SW8
SW9
SW10
SW11
SW12
SW13
SW14
SW15
SW16
PL1
GND
D13
BAV70
D14
BAV70
STROBE1
VDD
TOUCH
PL10
VCC
C16
0u1
GND
IC20
PIC16C73
RB0
RC0/OS0/CK1
RC1/OS1/CCP2
RC2/CCP1
RC3/SCK/SCL
RC4/SD1/SI
RC5/SDO
RC6/TX/CK
RB7
RC7/RX/DT
RA0
RA1
RA2
RA3
RA4/TOCK1
RA5/AN4/'SS
HCLR/Vpp
OSC2/COUT
OSC1/CIN
STROBE1
SCL
SDA
E_TXE
E_TXD
E_RXD
'SRESET
XT3a
4MHz
C29
C30
22p
22p
GND
VCC
BZ1
EI-242-B
VCC
C101
0u1
GND
L100
5mH
C102
0u1
R100
390R
R101
390R
IC100
4N32
PL1
APPROVED:
CHECKED:
DRAWN BY:
ISSUE
DATE:
28/01/02
MATERIAL:
FINISH:
SCALE:
TITLE:
10-0017-04a.rxl
KEYPAD.1
DRAWING NO.
SHEET 3 OF 9 SHEETS

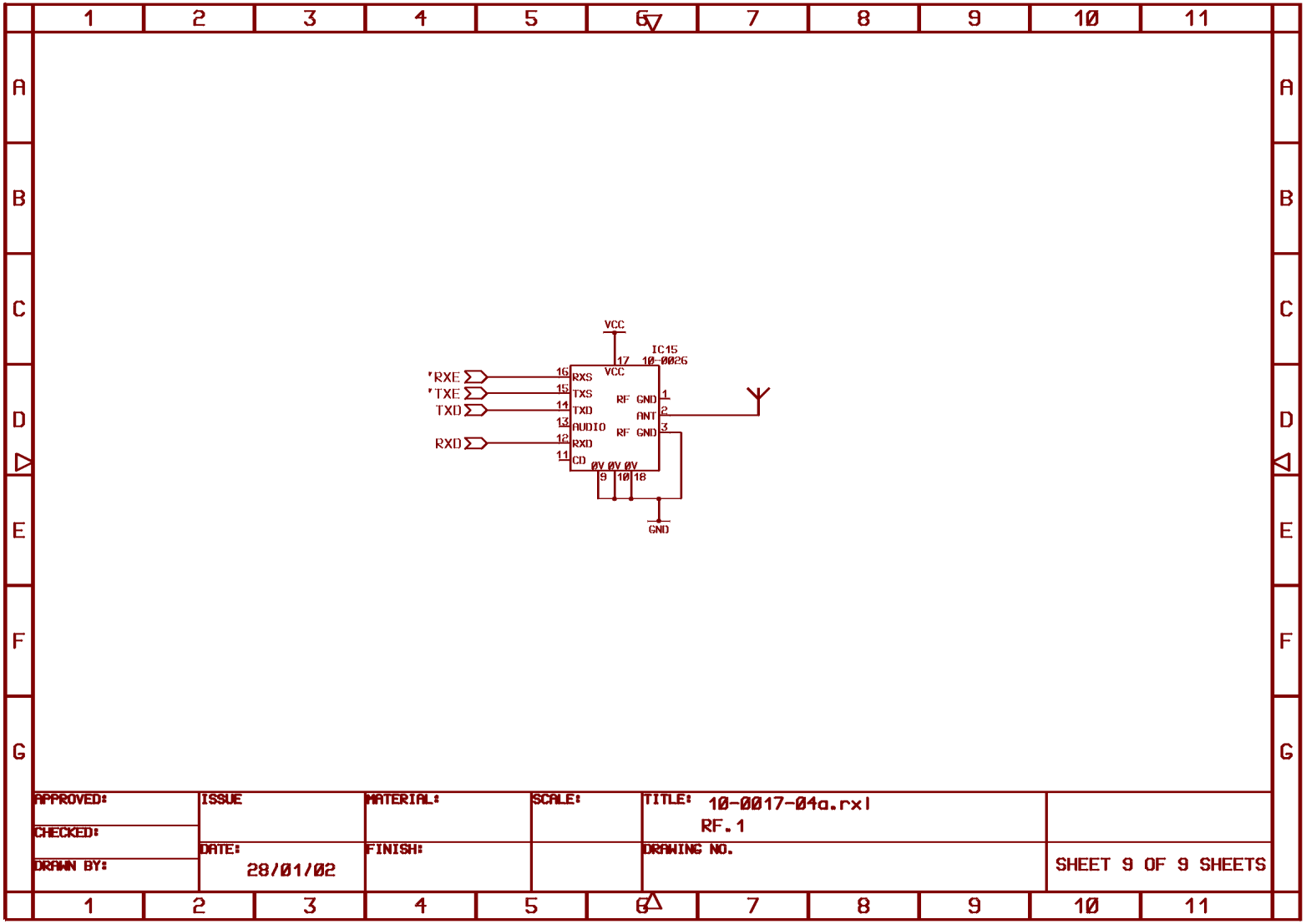

DATA
ADDR
'RD
'WR
'RAM_CS
'ROM_CS
VRAM
IC8
62256
VCC
GND
OE
CS
WE
IC6
28F010
IC5
X24F032
SCL
SDA
PL3
C5
0u1
LE1
APPROVED:
CHECKED:
DRAWN BY:
ISSUE
DATE:
28/01/02
MATERIAL:
FINISH:
SCALE:
TITLE:
10-0017-04a.rxl
MEMORY.1
DRAWING NO.
SHEET 4 OF 9 SHEETS

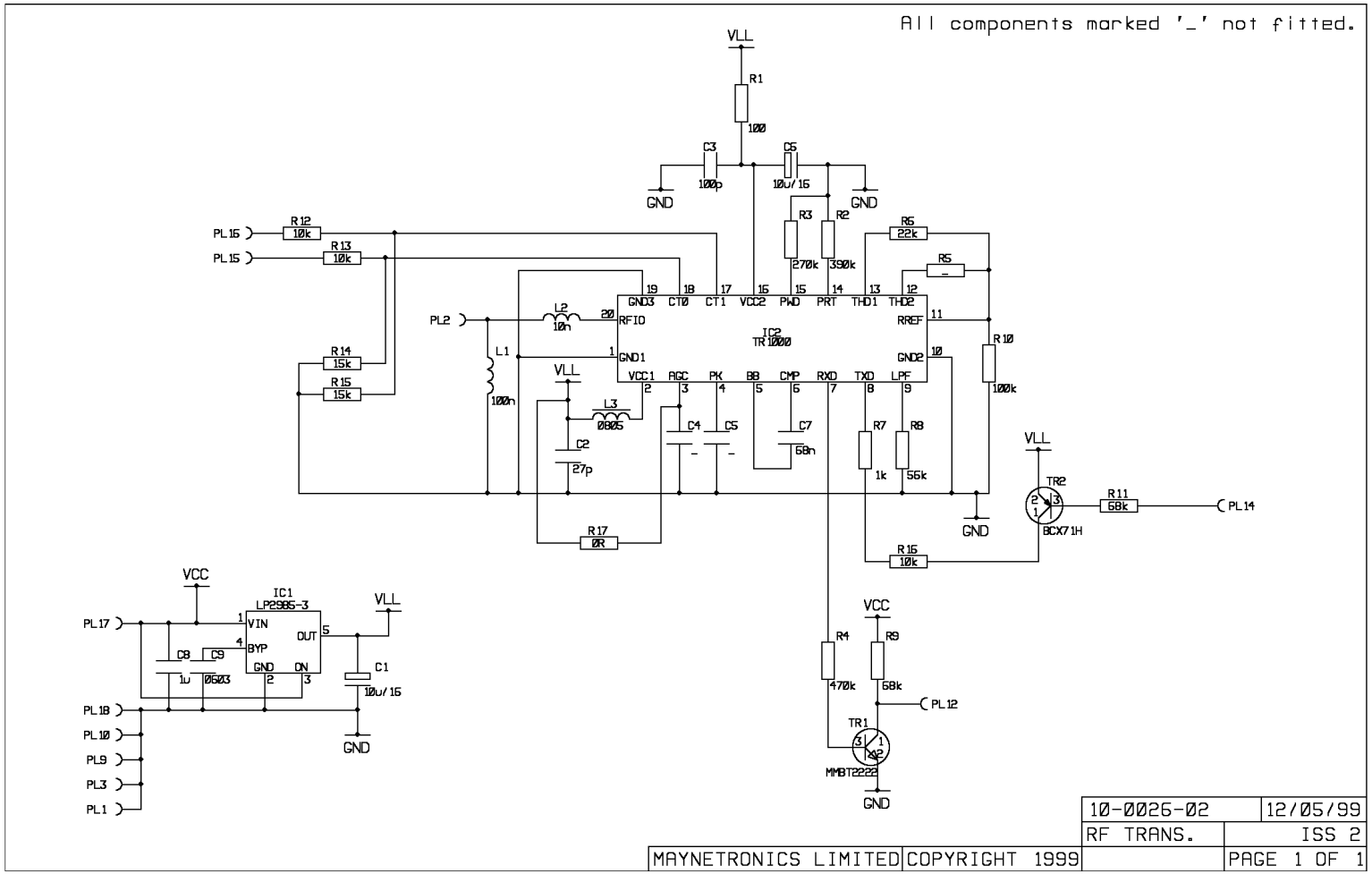

D8
S1A
D7
S1A
TR4
RFD10P03LSM
VCC
R11
100k
R10
10k
TR1
RFD10P03LSM
HK1
'TRICKLE
POWER ON
TR3
2N7002
IC13
ZR78L05CG
C10
0u1
GND
VID
IC7
ZR78L05CG
C27
C26
C25
22/6
0u1
VDD
IC12
uA78L05ACD
C9
0u1
LM358
IC10b
IC10a
LM358
C17
0u1
NDS0610
TR2
R16
1k
C8
0u1
PL6
PL11
BATT
R4
100k
IC10
LM358
GND
D6
BAV70
VRAM
R36
120R
C6
SG...V...1
C7
0u1
GND
R1
1R
IC1
VCC
CS
ADJ
DHI
ON
DLO
FB
GND
MAX749
NDS0605
TR6
D1
10MQ040N
VLCD
C4
NULL
R2
820k
CW
CCW
VR1
500k
L2
47u
C3
22/20
C2
0u1
C1
22/20
C18
0u1
APPROVED:
CHECKED:
DRAWN BY:
ISSUE
DATE:
28/01/02
MATERIAL:
FINISH:
SCALE:
TITLE:
10-0017-04a.rx1
POWER.1
DRAWING NO.
SHEET 5 OF 9 SHEETS

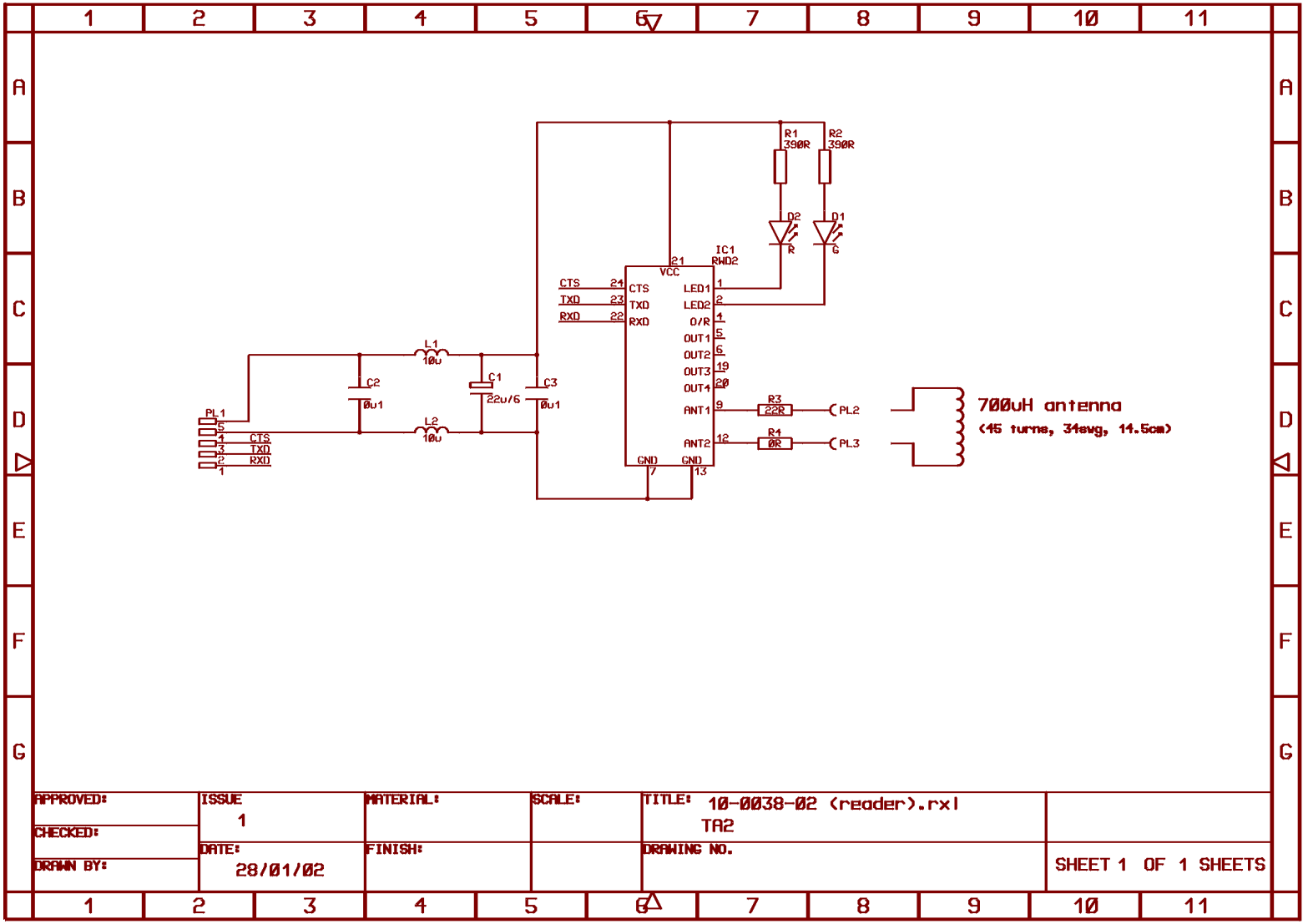

IC16
PIC16C73
SO28
RB0
RC0/OS0/CK1
RC1/OS1/CCP2
RC2/CCP1
RC3/SCK/SCL
RC4/SD1/SI
RC5/SDO
RC6/TX/CK
RC7/RX/DT
RB7
RA0
RA1
RA2
RA3
RA4/TOCK1
RA5/AN4/'SS
HCLR/Vpp
OSC2/COUT
OSC1/CIN
SCL
SDA
'SRESET
VID
GND
PL2
XT2
4MHz
C23
C24
0u1
0u1
GND
APPROVED:
CHECKED:
DRAWN BY:
ISSUE
DATE:
28/01/02
MATERIAL:
FINISH:
SCALE:
TITLE:
10-0017-04a.rxl
RFID INTERFACE.1
DRAWING NO.
SHEET 6 OF 9 SHEETS


IC19
MAX202CPE
#DIL16
C14
C15
C12
C13
C11
0u1
22U
10
+10
GND
VCC
TD0
TD1
RD0
RD1
T0
T1
R0
R1
E_TXD
E_RXD
E_TXE
IC18
MAX483
TE
RE
DE
A
B
PL7
PL5
C28
APPROVED:
CHECKED:
DRAWN BY:
ISSUE
DATE:
28/01/02
MATERIAL:
FINISH:
SCALE:
TITLE:
10-0017-04a.rxl
SERIAL IO.1
DRAWING NO.
SHEET 7 OF 9 SHEETS


1 2 3 4 5 6 7 8 9 10 11
A B C D E F G
DATA
ADDR
'SRESET
'DISP_CE
'RD
'WR
BACKLIGHT
IC14
128128
D0 D1 D2 D3 D4 D5 D6 D7
A0
C/'D
RST
CE
RD
WR
VLCD
VCC
VDD
VO
GND
FS
FGND
LED+
LED-
R22
NULL
TR5
2N7002
APPROVED:
CHECKED:
DRAWN BY:
ISSUE
DATE:
28/01/02
MATERIAL:
FINISH:
SCALE:
TITLE:
10-0017-04a.rxl
DISPLAY.1
DRAWING NO.
SHEET 8 OF 9 SHEETS


1 2 3 4 5 6 7 8 9 10 11
A B C D E F G
VCC
IC15
10-0026
17
VCC
'RXE
'TXE
TXD
RXD
16 RXS
15 TXS
14 TXD
13 AUDIO
12 RXD
11 CD
RF GND 1
ANT 2
RF GND 3
0V 0V 0V
9 10 18
GND
APPROVED:
CHECKED:
DRAWN BY:
ISSUE
DATE:
28/01/02
MATERIAL:
FINISH:
SCALE:
TITLE: 10-0017-04a.rxl
RF.1
DRAWING NO.
SHEET 9 OF 9 SHEETS


All components marked '_' not fitted.
VLL
R1
100
C3
100p
C5
10u/15
GND
R3
270k
R2
390k
R6
22k
R5
_
PL15
R12
10k
R13
10k
PL2
L2
10n
L1
100n
IC2
TR1000
GND3
CT0
CT1
VCC2
PWD
PRT
THD1
THD2
RFIO
RREF
GND1
GND2
VCC1
AGC
PK
BB
CMP
RXD
TXD
LPF
R14
15k
R15
15k
R10
100k
L3
0805
C2
27p
C4
C5
C7
68n
R7
1k
R8
56k
TR2
BCX71H
R11
68k
PL14
R17
0R
R15
10k
VCC
IC1
LP2985-3
VIN
BYP
GND
ON
OUT
PL17
C8
1u
0603
C9
C1
10u/15
PL18
PL10
PL9
PL3
PL1
R4
470k
R9
68k
PL12
TR1
MMBT2222
10-0026-02
12/05/99
RF TRANS.
ISS 2
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PAGE 1 OF 1


1 2 3 4 5 6 7 8 9 10 11
A B C D E F G
R1 390R
R2 390R
D2 R
D1 G
IC1 RWD2
21 VCC
CTS 24 CTS
TXD 23 TXD
RXD 22 RXD
LED1 1
LED2 2
O/R 4
OUT1 5
OUT2 6
OUT3 19
OUT4 20
ANT1 9
ANT2 12
GND 7
GND 13
L1 10u
L2 10u
C1 22u/6
C2 0u1
C3 0u1
R3 22R
R1 0R
PL1
PL2
PL3
CTS
TXD
RXD
700uH antenna
(45 turns, 34swg, 14.5cm)
APPROVED:
CHECKED:
DRAWN BY:
ISSUE 1
DATE: 28/01/02
MATERIAL:
FINISH:
SCALE:
TITLE: 10-0038-02 (reader).rxl
TA2
DRAWING NO.
SHEET 1 OF 1 SHEETS