USB

CN1
CN-USB

1
2
3
4

5

SHIELD

FB1
FERRITE BEAD
1   2   o VCC

C11
10nF

R4
1k5

C9
33nF

VCC

R13
470R

C12
0.1uF

VCC   VCC

R7   10R
R8   10R

7 USBDP
8 USBDM

6 3V3OUT

VCC

Y1
6MHz RESONATOR

R5
100k

C10
0.1uF

27 XTIN

28 XTOUT

31 RCCLK

4 RESET#

POWER-ON RESET

VCC

C13
10nF

R10
100k

Q1
2N3906

R11
470k

R9
100k

DECOUPLING CAPS

VCC

VCC

C8
10uF

C7
0.1uF

C5
0.1uF

C6
0.1uF

GND

30 AVCC
3 VCC
13 VCC
26 VCC

U3

25 TXD   TXD
24 RXD   RXD
23 RTS#   RTS#
22 CTS#   CTS#
21 DTR#   DTR#
20 DSR#   DSR#
19 DCD#   DCD#
18 RI#   RI#

16 TXDEN
15 USBEN
14 PWRCTL
12 TXLED#
11 RXLED#

10 SLEEP#   SLEEP#

32 EECS
1 EESK
2 EEDATA

5 TEST

29 AGND
9 GND
17 GND

FT8U232AM Rev 2

VCC

R12
100k

U2
1 CS   VCC 8
2 SK   NC   7
3 DIN   NC   6
4 DOUT   GND 5

93C46
(Optional)

R6
2k2

R3
10k

TX D1 LED   D2 LED RX

VCC   VCC

R1
220R

R2
220R

SKT1
DB9M

RI   5
DTR   9
CTS   4
TXDATA   8
RTS   3
RXDATA   7
DSR   2
DCD   6
          1

          10

SHIELD

U1

TXD   14 T1IN   T1OUT 9   TXDATA
DTR# 13 T2IN   T2OUT 10 DTR
RTS# 12 T3IN   T3OUT 11 RTS

RXDATA 4 R1IN   R1OUT 19 RXD
RI   5 R2IN   R2OUT 18 CTS#
CTS   6 R3IN   R3OUT 17 DSR#
DSR   7 R4IN   R4OUT 16 DCD#
DCD   8 R5IN   R5OUT 15 RIB
          R2OUTB   20

SLEEP# 22 OFF#   INVALID# 21
SLEEP# 23 ON

27 V+   V-   3

28 C1+   C2+ 1
24 C1-   C2- 2

25 GND   VCC 26

MAX3245CAI

C2
330nF

C1
330nF

C3
330nF

C4
330nF

VCC

VCC

R14
100k

Q2
2N3904

RI#

R15
100k
RIB

FT8U232AM Rev 2 APPLICATION SCHEMATIC

ULTRABAUD USB <=> RS232 SERIAL CONVERTER (300 to 920k baud)

USB-232A, 13th March 2001