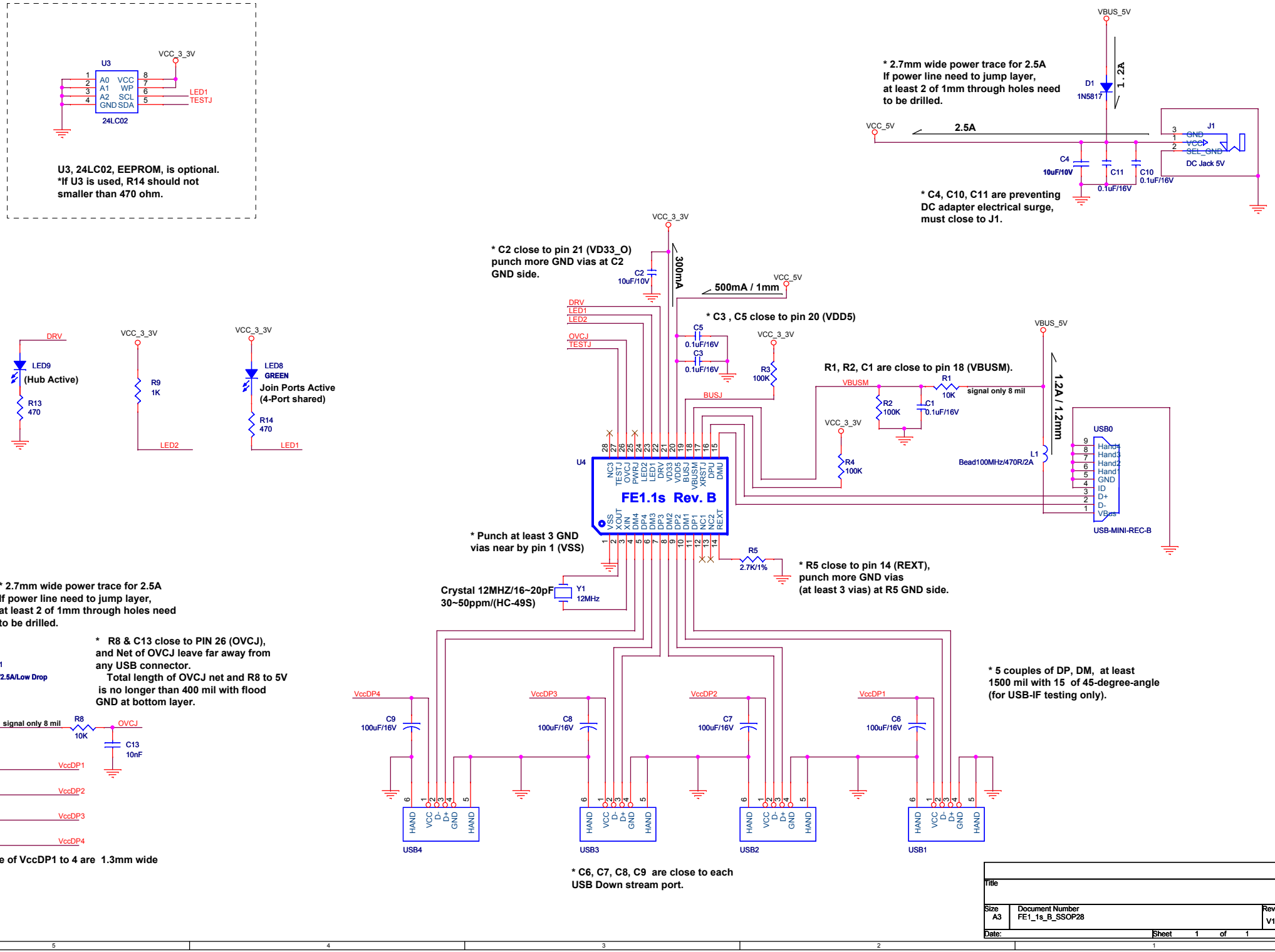
U3
VCC_3_3V
A0 VCC
A1 WP
A2 SCL
GND SDA
LED1
TESTJ
24LC02
U3, 24LC02, EEPROM, is optional.
*If U3 is used, R14 should not
smaller than 470 ohm.
* 2.7mm wide power trace for 2.5A
If power line need to jump layer,
at least 2 of 1mm through holes need
to be drilled.
VBUS_5V
D1
1N5817
1.2A
VCC_5V
2.5A
J1
GND
VCC
SEL_GND
DC Jack 5V
C4
10uF/10V
C11
0.1uF/16V
C10
0.1uF/16V
* C4, C10, C11 are preventing
DC adapter electrical surge,
must close to J1.
DRV
LED9
(Hub Active)
R13
470
VCC_3_3V
R9
1K
LED2
VCC_3_3V
LED8
GREEN
Join Ports Active
(4-Port shared)
R14
470
LED1
VCC_3_3V
* C2 close to pin 21 (VD33_O)
punch more GND vias at C2
GND side.
C2
10uF/10V
300mA
500mA / 1mm
VCC_5V
DRV
LED1
LED2
OVCJ
TESTJ
* C3 , C5 close to pin 20 (VDD5)
C5
0.1uF/16V
C3
0.1uF/16V
VCC_3_3V
R3
100K
R1, R2, C1 are close to pin 18 (VBUSM).
VBUS_5V
VBUSM
R1
10K
signal only 8 mil
R2
100K
C1
0.1uF/16V
BUSJ
VCC_3_3V
R4
100K
1.2A / 1.2mm
L1
Bead100MHz/470R/2A
USB0
Hand4
Hand3
Hand2
Hand1
GND
ID
D+
D-
VBus
USB-MINI-REC-B
U4
NC3
TESTJ
OVCJ
PWRJ
LED2
LED1
DRV
VDD5
BUSJ
VBUSM
XRSTJ
DPU
DMU
FE1.1s Rev. B
VSS
XOUT
XIN
DM4
DP4
DM3
DP3
DM2
DP2
DM1
DP1
NC1
NC2
REXT
* Punch at least 3 GND
vias near by pin 1 (VSS)
R5
2.7K/1%
* R5 close to pin 14 (REXT),
punch more GND vias
(at least 3 vias) at R5 GND side.
Crystal 12MHZ/16~20pF
30~50ppm/(HC-49S)
Y1
12MHz
* 2.7mm wide power trace for 2.5A
If power line need to jump layer,
at least 2 of 1mm through holes need
to be drilled.
VCC_5V
2.5A / 2.7mm
F1
5V/2.5A/Low Drop
* R8 & C13 close to PIN 26 (OVCJ),
and Net of OVCJ leave far away from
any USB connector.
Total length of OVCJ net and R8 to 5V
is no longer than 400 mil with flood
GND at bottom layer.
signal only 8 mil
R8
10K
OVCJ
C13
10nF
VccDP1
VccDP2
VccDP3
VccDP4
Trace of VccDP1 to 4 are 1.3mm wide
* 5 couples of DP, DM, at least
1500 mil with 15 of 45-degree-angle
(for USB-IF testing only).
VccDP4
C9
100uF/16V
VccDP3
C8
100uF/16V
VccDP2
C7
100uF/16V
VccDP1
C6
100uF/16V
HAND
VCC
D-
D+
GND
HAND
USB4
USB3
USB2
USB1
* C6, C7, C8, C9 are close to each
USB Down stream port.
Title
Size
A3
Document Number
FE1_1s_B_SSOP28
Rev
V1.3
Date:
Sheet 1 of 1