6V3-15VDC INPUT

F1
DC_PWR

U2
LM1117T-5.0
IN OUT
GND

5V0_REG

C3
10uF

C2
10uF

GND
GND
GND

J3

J5
VBUS
D-
D+
ID
MH1
MH2 GND

5V0_USB

GND
GND
GND

C4
4.7uF
C5
100uF

GND
GND

J2

D1
A K
1N5820RLG

PWR1

U3
LM1117T-ADJ
IN OUT
ADJ

5VOUT

ADJOUT

J4

J6

GND

P1
5VOUT   1
PWR-L   2
PWR-L   3
ADJOUT   4
Header 4

P2
5VOUT   1
PWR-R   2
PWR-R   3
ADJOUT   4
Header 4

PWR-L   PWR-R
PWR2   PWR3
PWR4   PWR5

GND   GND

J1

R1 R2 R3 R4 R5 R6 R7 R8
1206 1206 1206 1206 1206 1206 1206 1206
230 230 230 230 230 230 230 230

LED1 LED2 LED3 LED4 LED5 LED6 LED7 LED8

GND   GND

P3

U_BGA Modules
BGA Modules.SchDoc
GND   GND

P4

GND GND GND GND   LED1 LED2 LED3 LED4

P4_LAND1
MODCMP-P056-M10X10_BGA

C9 B9 A9 B8 B7 A7 B6 A6 B5 A5 B4 A4 B3 A3 B2 B1 A1 C1
C8   C2
D9   D1
D8   D2
E9   E1
E8   E2
F9   F1
F8   F2
G9   G1
G8 J9 H9 J8 H8 J7 H7 J6 H6 J5 H5 J4 H4 J3 H3 J2 H2 J1 H1 G2

P4_LAND2
MODCMP-P056-M10X10_BGA

G2 H1 J1 H2 J2 H3 J3 H4 J4 H5 J5 H6 J6 H7 J7 H8 J8 H9 J9 G8
G1   G9
F2   F8
F1   F9
E2   E8
E1   E9
D2   D9
D1   D8
C2   C8
C1 A1 B1 A2 B2 A3 B3 A4 B4 A5 B5 A6 B6 A7 B7 A8 B8 A9 B9 C9

LED1 LED2 LED3 LED4

GND GND GND GND

GND GND GND

A1 B1 A2 B2 A3 B3 A4 B4 A5 B5 A6 B6 A7 B7 A8 B8 A9 B9

P5
MODCMP-P056-M10X10

GND GND GND GND

C1 C9
C2 C8
D1 D9
D2 D8
E1 E9
E2 E8
F1 F9
F2 F8
G1 G9
G2 G8

U_BGA LEDs A
BGA LEDs A.SchDoc

LED_A1 LED_A2 LED_A3 LED_A4

LED_A1 LED_A2 LED_A3 LED_A4

H1 J1 H2 J2 H3 J3 H4 J4 H5 J5 H6 J6 H7 J7 H8 J8 H9 J9

A1 B1 A2 B2 A3 B3 A4 B4 A5 B5 A6 B6 A7 B7 A8 B8 A9 B9

P6
MODCMP-P056-M10X10

GND GND GND GND

C1 C9
C2 C8
D1 D9
D2 D8
E1 E9
E2 E8
F1 F9
F2 F8
G1 G9
G2 G8

U_BGA LEDs B
BGA LEDs B.SchDoc

LED_B1 LED_B2 LED_B3 LED_B4

LED_B1 LED_B2 LED_B3 LED_B4

P7
H1 J1 H2 J2 H3 J3 H4 J4 H5 J5 H6 J6 H7 J7 H8 J8 H9 J9

A1 B1 A2 B2 A3 B3 A4 B4 A5 B5 A6 B6 A7 B7 A8 B8 A9 B9

MODCMP-P056-M10X10

GND GND GND GND

C1 C9
C2 C8
D1 D9
D2 D8
E1 E9
E2 E8
F1 F9
F2 F8
G1 G9
G2 G8

U_BGA LEDs C
BGA LEDs C.SchDoc

LED_C1 LED_C2 LED_C3 LED_C4

LED_C1 LED_C2 LED_C3 LED_C4

H1 J1 H2 J2 H3 J3 H4 J4 H5 J5 H6 J6 H7 J7 H8 J8 H9 J9

LED C1
LED C2
LED C3
LED C4

LED C1
LED C2
LED C3
LED C4

R17
1206
230

R18
1206
230

R19
1206
230

R20
1206
230

LED17 LED18 LED19 LED20

GND

GND GND

GND GND

GND GND

GND GND

LED_B1 LED_B2 LED_B3 LED_B4

LED_B1 LED_B2 LED_B3 LED_B4

R13 **R14** **R15** **R16**
0805 0805 0805 0805
230 230 230 230

LED13 LED14 LED15 LED16

GND

GND ▷ GND
GND ▷ GND
GND ▷ GND
GND ▷ GND

LED_A1

LED_A2

LED_A3

LED_A4

LED_A1

LED_A2

LED_A3

LED_A4

R9
0805
230

R10
0805
230

R11
0805
230

R12
0805
230

LED9 LED10 LED11 LED12

GND

GND ✕ GND

GND ✕ GND

GND ✕ GND

GND ✕ GND

V Score the lines on *.GM2

Board Outline Mech 1
VScore Mechanical 2