BOOT

+3V3

JP1

BOOT0

R1
10k

RESET

S1
3   4
1   2

NRST

C11
100n

Programming Connector

J1
+3V3   1   2   +3V3
        3   4
        5   6
SWDIO   7   8
SWCLK   9   10
        11   12
        13   14
NRST   15   16
        17   18
        19   20

USB B Connector

J2
+5V   1
D-   2
D+   3
X   4
GND   5
        6 7 8 9

R4 22   USB_DM
R5 22   USB_DP

R6   +3V3
1k5

+5V

R3
1M

C12
470p

Optional Power

Connector

J3-1   +V1

J3-2

CPU

+3V3   +3V3   +3V3_ANA

32   16   1   17   5
VSS1 VSS2 VDD1 VDD2 VDDA

NRST   4   NRST

BOOT0   31   BOOT0

IC1

PA0   6   PA0
PA1   7   PA1
PA2   8   PA2
PA3   9   PA3
PA4   10   PA4
PA5   11   PA5
PA6   12   PA6
PA7   13   PA7
PA8   18   PA8
PA9   19   PA9
PA10   20   PA10
USB_DM 21   PA11
USB_DP 22   PA12
SWDIO   23   PA13
SWCLK   24   PA14
PA15   25   PA15

PC14   2   PC14
PC15   3   PC15

PB0   14   PB0
PB1   15   PB1

PB3   26   PB3
PB4   27   PB4
PB5   28   PB5
PB6   29   PB6
PB7   30   PB7

STM32L052K6T6

Decoupling Capasitors

Close to CPU power connections

Task Board connector

J4
+V2   1   2   +V2
+V1   3   4   +V1
+3V3   5   6   +3V3
        7   8
        9   10
PA10   11   12   PA15
PA8   13   14   PA9
PA6   15   16   PA7
PA4   17   18   PA5
PA2   19   20   PA3
PA0   21   22   PA1
        23   24
PB6   25   26   PB7
PB4   27   28   PB5
NRST   29   30   PB3
PB0   31   32   PB1
        33   34
PC14   35   36   PC15
        37   38
        39   40

Empty connector for measuring

J5
+V2   1   2   +V2
+V1   3   4   +V1
+3V3   5   6   +3V3
        7   8
        9   10
PA10   11   12   PA15
PA8   13   14   PA9
PA6   15   16   PA7
PA4   17   18   PA5
PA2   19   20   PA3
PA0   21   22   PA1
        23   24
PB6   25   26   PB7
PB4   27   28   PB5
NRST   29   30   PB3
PB0   31   32   PB1
        33   34
PC14   35   36   PC15
        37   38
        39   40

Power Supply

D3
+V2

D1
+5V

SS12

D2
+V1

F1
300mA

C1
10u
25V
0805

C2
100n

IC2
NCP1117LP
3   VIN   VOUT 2
    VO_PAD   4
    GND   1

C3
100n

C4
10u

+3V3

PWR LED

R2
1k5

LD1

L1
1k@100 Mhz

C9
10u

C10
100n

+3V3_ANA

+3V3

C5
10u

C6
100n

C7
10u

C8
100n

+3V3

X1 X2 X3 X4   GND1 GND

Tietomyrsky
www.tietomyrsky.fi

TITLE: STM32L052 WS CPU

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