Title block:

RoboWay
Sheet: /
File: main-int.kicad_sch
Title: Water Plant main module
Size: A4   Date:
KiCad E.D.A. 8.0.3
Rev:
Id: 1/4

C23
100n

GND

L – 10uH, 0.4A
L – 2uH (up to 4.7) – 1.3A

L3
XRTC322512S100MBCA

JP1

→ +3.3V

BST 1 8
VIN 2
EN 3
RT/CLK 4

PAD 9

SW 8 7
GND 7 6
SS 6 5
FB 5

U4
AP64352SP-13

GND

VBUS ←

C22
10.0

GND

R16
45K

GND

GND

C24
10n

GND

R17
69K8

C25
NP

R18
22K1

GND

C16
22.0

C26
22.0

C27
100

GND

C17
100n

GND

Rt (K) is 100000/Fsw(KHz)
100KHz – 1M
1MHz – 100K
2.2MHz – 45K

L2
XRTC322512S100MBCA

JP2

→ +9V

BST 1 8
VIN 2
EN 3
RT/CLK 4

PAD 9

SW 8 7
GND 7 6
SS 6 5
FB 5

U3
AP64352SP-13

GND

C45
1000

GND

EN9D

C43
10.0

R20
200K

R13
45K

GND

GND

C18
10n

GND

R14
226K

C19
NP

R15
22K1

GND

C20
22.0

C21
22.0

C44
100

GND

GND

GND

In box only

J5
220V
1
2

PS1
IRM-20-12

AC/L 1 4 +Vo → VBUS
AC/N 2 3 -Vo ▷ GND

U6
AP2204R-5.0

JP3

→ +5V

VIN 1 3 VOUT
GND 2

C28
1.0

C29
2.2

C47
100

GND

GND

GND

GND

RoboWay

Sheet: /Power/
File: power.kicad_sch

Title: Power module

Size: A4   Date:

KiCad E.D.A. 8.0.3

Rev:

Id: 2/4

+3.3V

C34
0.1

GND

U7
74HC594

MOSI — 14 SER — VCC 16
CLK — 11 SRCLK — QA 15
— 10 SRCLR — QB 1
CS — 12 RCLK — QC 2
RESET — 13 RCLR — QD 3
— QE 4
— QF 5
— QG 6
— QH 7
— GND 8 — QH' 9

+3.3V

GND

R23 100 — Q1A FDS9926A — D3 ES3A
GND — +9V

R24 100 — Q1B FDS9926A — D4 ES3A
GND — +9V

R25 100 — Q2A FDS9926A — D5 ES3A
GND — +9V

R26 100 — Q2B FDS9926A — D6 ES3A
GND — +9V

R27 100 — Q3A FDS9926A — D7 ES3A
GND — +9V

R28 100 — Q3B FDS9926A — D8 ES3A
GND — +9V

R29 100 — Q4A FDS9926A — D9 ES3A
GND — +9V

+9V

J6
Conn_01x08_Pin
1 2 3 4 5 6 7 8

In box only

R10 100 — Q4B FDS9926A
VBUS
MotorS

RoboWay
Sheet: /Valves/
File: valves.kicad_sch
Title: Valves interface
Size: A4   Date:
KiCad E.D.A. 8.0.3   Id: 3/4
Rev: