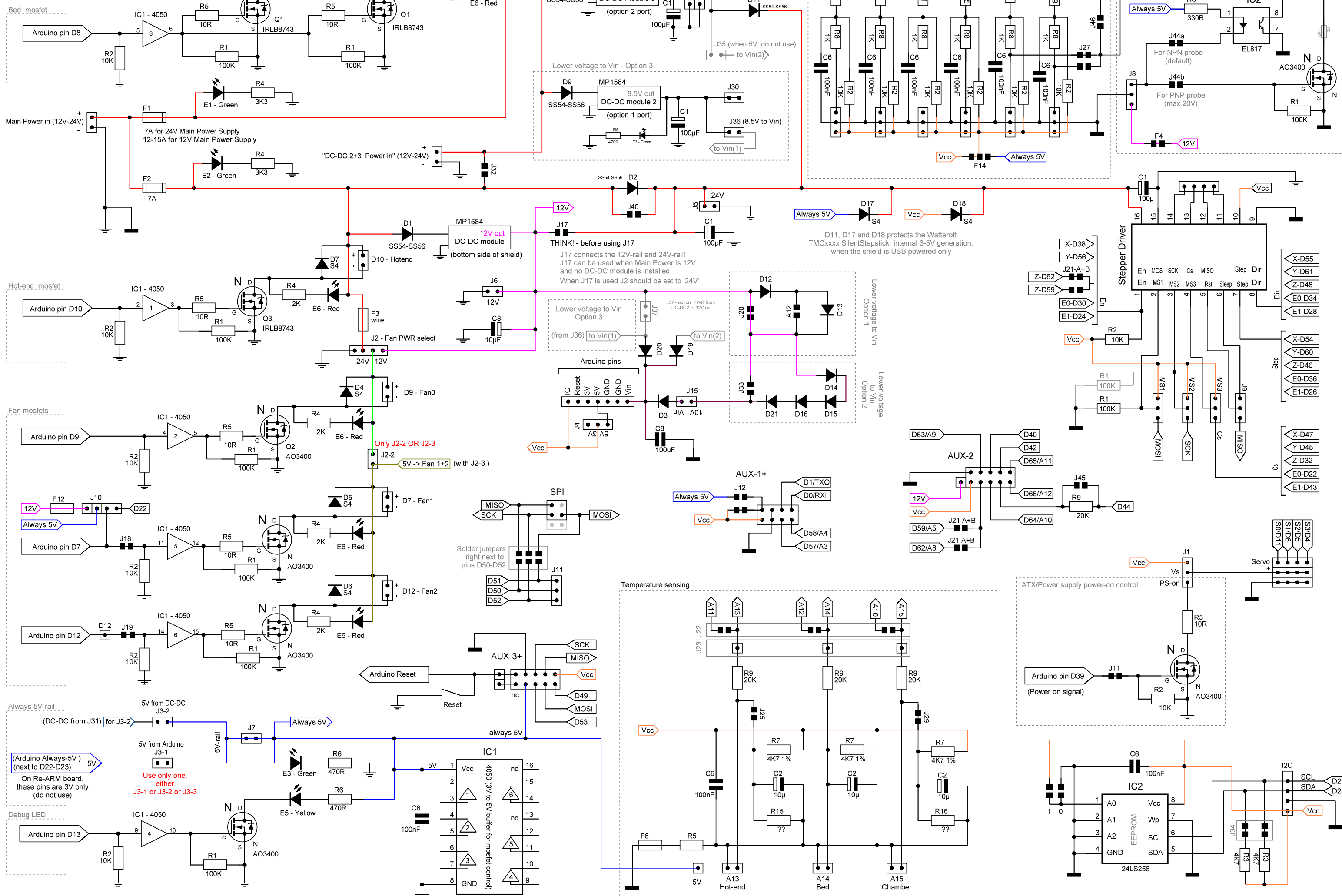


RAMPS 1.4.4 Rev.C5

24V, 12V, 8V, 5V and Vcc power rails

2020-Jan-06



Bed mosfet

Main Power in (12V-24V)

Hot-end mosfet

Fan mosfets

Always 5V-rail

Debug LED

Lower voltage to Vin - Option 3

Lower voltage to Vin Option 3

Lower voltage to Vin Option 1

Lower voltage to Vin Option 2

Temperature sensing

End-stop

ATX/Power supply power-on control

High Volt Z-probe

THINK! - before using J17
J17 connects the 12V-rail and 24V-rail!
J17 can be used when Main Power is 12V and no DC-DC module is installed.
When J17 is used J2 should be set to '24V'

D11, D17 and D18 protects the Watterott TMCxxxx SilentStepstick internal 3-5V generation, when the shield is USB powered only

Solder jumpers right next to pins D50-D52

IC2
24LS256

Stepper Driver

AUX-1+

AUX-2

AUX-3+

Servo

Only J2-2 OR J2-3

Only J2-2 OR J2-3

Only J2-2 OR J2-3

Only J2-2 OR J2-3

Only J2-2 OR J2-3

Only J2-2 OR J2-3

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Only J2-2 OR J2-3

Only J2-2 OR J2-3

Only J2-2 OR J2-3

Only J2-2 OR J2-3

Arduino pin D8

7A for 24V Main Power Supply
12-15A for 12V Main Power Supply

Arduino pin D10

Arduino pin D9

12V
Always 5V

Arduino pin D7

5V from DC-DC J3-2
5V from Arduino J3-1

Arduino pin D13

MP1584 DC-DC module 3
5V out (option 2 port)

MP1584 DC-DC module 2
8.5V out (option 1 port)

MP1584 DC-DC module
12V out (bottom side of shield)

Arduino pins

AUX-1+

AUX-2

AUX-3+

Arduino Reset

IC2
EL817

Stepper Driver

AUX-2

Servo

IC2
24LS256