THE DEFINITIVE evive PINOUT DIAGRAM

1.8" TFT SPI Interface ST7735R

GND
LEDK
LEDA — 3V3
GND
RST LCD
D/C LCD
MOSI
SCK
CS LCD
GND

GND
A9 — 5V
GND — 40 / 5V / 41 — GND
38 — GND / 5V
GND
A10 — 5V
GND — 42 / 5V / 43 — GND
39 — GND / 5V

USB Charging Mode
5V Buck
5V
5V Bat

3.7V 2600mAh

GND — 3V3
GND — 5V
GND — VVR
GND — VSS
GND — VIN

Adjust Variable Voltage Supply 1.25-30V

Overvoltage Protection (30V)
Overcurrent Protection (3A)
Reverse Polarity Protection

MISO
GND
SCK
3V3
MOSI
CS SD

5V — CHARGE — RESET — GND

A11
5V
U L R D
19
GND

5V
GND
Test Point

XBee
3V3
RX33V3
TX33V3
GND

HC-05
TX33V3
RX33V3
GND
3V3

WiFi ESP8266
3V3
RX33V3
TX33V3
3V3
GND

46
GND

GND — GND — GND
53 PB0 | PB1 52 — SCK
MOSI 51 PB2 | PB3 50 — MISO
D/C TFT 49 PL0 | PL1 48 — CS TFT
RST TFT 47 PL2 | PL3 46 — Buzzer
Motor2 En 45 PL4 | PL5 44 — Motor1 En
SlideSw2 Dir2 43 PL6 | PL7 42 — SlideSw2 Dir1
SlideSw1 Dir2 41 PG0 | PG1 40 — SlideSw1 Dir1
Tactile Sw 2 39 PG2 | PD7 38 — Tactile Sw 1
IO3V3 37 PC0 | PC1 36 — IO3V3
CS ADC 35 PC2 | PC3 34 — CS SD
Dir Level Shifter 33 PC4 | PC5 32 — DReady
Motor2 Dir2 31 PC6 | PC7 30 — Motor2 Dir1
Motor1 Dir2 29 PA7 | PA6 28 — Motor1 Dir1
27 PA5 | PA4 26
25 PA3 | PA2 24
23 PA1 | PA0 22
5V | 5V | 5V

DIGITAL

MPR121
1 | 11
2 | 12
Capacitive Touch Sensor

Set Input Voltage for Motor Driver IC to VVR or VSS using Jumper JP1
VVR — JP1 — VSS

SN754410
29 | 28 | 44
45 | 30 | 31

Max 1A Per Channel ⚠
Thermal Shutdown

MOTORS

Servos
GND | VVR | 45 | 44

Motor Drivers
GND | VVR | 45 | 30 | 31 | 44 | 28 | 29

74LVC245
36 | 37 | 33
36 3V3 | 37 3V3
IO 3V3

PCF8563
VBat | SCL | SDA

MCP4725
SCL | SDA
GND
DAC

NavKey Dir — POT 2 — POT 1 — Vbat Sense — VVR Sense — VIN Sense
PK7 PK6 PK5 PK4 PK3 PK2 PK1 PK0 PF7 PF6 PF5 PF4 PF3 PF2 PF1 PF0
GND GND 5V 3.3V RESET IOREF

A15 A14 A13 A12 A11 A10 A9 A8 A7 A6 A5 A4 A3 A2 A1 A0 VIN GND 5V 3V3 RESET IOREF
ANALOG IN

Arduino MEGA 2560
RESET
GND
MOSI
5V
MISO
SCK

COMMUNICATION
SCL 21 SDA 20 INT1 19 RX2 17 TX2 16 TX3 14 RX0 0 TX0 1
DIGITAL OR PWM
2 3 4 5 6 7 8 9 10 11 12 13 GND AREF SCL SDA

PD0 PD1 PD2 PD3 PH0 PJ0 PJ1 PF0 PE1 PE5 PG5 PE3 PH3 PH4 PH5 PH6 PB4 PB5 PB6 PB7 AREF PD0
NavKeyPress

Legend
- GND
- VIN/VSS/VVR
- 5V
- 3V3
- Control
- Digital Pin
- Analog Pin
- Port Pin
- Communication
- Component
- ⓘ Information
- ⚠ Attention

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Dec 9th, 2016 | Version 1
www.evive.cc

Probe I/V can be set for Voltage sensing (±5V) or Current Sensing (±3A) using Jumper JP2
I Mode — JP2 — V Mode

ADE7912
VBat | SCL | SDA
GND
DAC
PROBE I/V | COM | PROBE V