Power Supply Section

12V

SW4
1
2
3

VIN1
1
2
3

VIN2
PVIN
GND

GND

12V   ARD-VIN

D1
S2M

12V   12V
C11   C12
100nF   22uF
GND   GND

12V
IN   OUT
GND   TAB
U3
LD117-5

5V

5V   5V
C13   C14
22uF   100nF
GND   GND

12V   12V
C15   C16
100nF   22uF
GND   GND

12V
IN   OUT
GND   TAB
U2
LD117-3.3

3V3

3V3   3V3
C17   C18
22uF   100nF
GND   GND

Switch / Logic Section

VCC
R1 10k
R2 22k
5   U1F   6   SW1
74HC14D
SW1
C1 1uF
GND   GND

VCC
C4 100nF
GND

VCC
R3 10k
R4 22k
3   U1E   4   SW2
74HC14D
SW2
C2 1uF
GND   GND

VCC
R5 10k
R6 22k
1   U1D   2   SW3
74HC14D
SW3
C3 1uF
GND   GND

13   U1A   12
74HC14D
GND

11   U1B   10
74HC14D
GND

9   U1C   8
74HC14D
GND

PULSE SHAPER POWER SUPPLY MODULE

12V
Q1 P
R9 22k
CH
R8 100k
GND
Q2 N
GND
C6 100nF
C7 47uF
C8 47uF
C9 47uF
C10 47uF
GND
R10 22k
Q3 P
VF
Q4 N
PL
R11 100k
GND   GND

Arduino Section

CLK   1   D13/SCK   D12/MISO   30   DOUT
       2   3V3   D11/MOSI   29   DOUT
       3   AREF   D10   28   SW1
TEMP   4   A0   D9   27   SW2
INT   5   A1   D8   26   SW3
CH   6   A2   D7   25
PL   7   A3   D6   24
SDA   8   A4/SDA   D5   23
SCL   9   A5/SCL   D4   22
       10   A6   D3   21
       11   A7   D2   20
EN   12   5V   GND   19   GND
       13   RST   RST   18
ARD-VIN 14 GND   D0/RX   17
       15   VIN   D1/TX   16
GND
ARDUINO
NANO EVERY
NANO 33 IOT

VCC
NANO EVERY   NANO 33 IOT
5V   3V3
1 2 3
PH4
VCC

VCC
VCC
FOUT
FOE
NC
SCL
SDA   SCL
SDA   SDA
INT   INT
       GND
RTC
GND

VCC
C5 100nF
GND

VCC   VCC
SENSOR
1
2   TEMP
3
R7 10k
GND

VCC   VF
3
2
1
PH1
GND

DOUT   3
EN   2
CLK   1
PH2