Clock input

J1
AudioJack2
GND

R4 100k
R5 1M
D2 1N5817
GND

+5V
R1 1k
R2 10k
D1 LED
R3 1k
Q1 2N3904
SW1 SW_Push
C1 100nF
CLOCK_IN
GND

Arduino

Arduino
+5V
27 +5V
17 3V3
30 VIN
RESET RESET
AREF
RATE_IN
A0 A1 A2 A3 A4 A5 A6 A7
GND GND 29
GND
A1
Arduino_Nano_v2.x
D0/RX D1/TX D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13
CLOCK_IN GATE_OUT CLOCK_SEL
SS MOSI MISO SCK

Gate output

J2
AudioJack2
GND
V_GATE
R7 100R
Q2 2N3904
R6 10k
GATE_OUT
D3 LED
R9 1k
R8 10k
GND

SD Card Module

A2
SD_CARD_MODULE
SS 1 CS
SCK 2 SCK
MOSI 3 MOSI
MISO 4 MISO
+5V 5 VCC
GND 6 GND

Clock/rate select

SW2
SW_SPST
GND
CLOCK_SEL
*switch closed = external clock
+5V
RV1 B100k
RATE_IN
C7 100nF
GND

Power

U1 L78L09
+12V VI VO
C2 330nF
GND
C3 100nF
V_GATE
GND

U2 L78L05
+12V VI VO +5V
C4 330nF
GND
C5 100nF
GND

GND
C6 10uF
R10 10R
+12V

J3
Conn_02x05
1 2
3 4
5 6
7 8
9 10
GND