CN1

+5V UDM
ST

1 SCL/RX
2 SDA/TX
3 VDD
4 GND

GND

CON_GROVE

JP1
Jumper_2_Open
1 2
UDP
GND

J1
Conn_01x01

+5V

+5V
U1

UDM 5 P3.0/RXD VCC 2
UDP 6 P3.1/TXD P5.4 1 LOAD
PMC_EN 7 P3.2 P5.5 3 CHG
ADC 8 P3.3

R3
10k

9 GND(EP) GND 4

MCU_STC8G-8P
STC8G1K08"A"

GND

P33=ADC3
ADC=Vdrive/4

Vdrive Q2
S

R11
TBD(470)

R4
100k

C1
C_Polarized

GND

CHG

100k R9

ADC
D1
D

R10 100k

GND

R5
1k
ST
+5V

1
2
3
4

J2
Conn_01x04

GND

LOAD

1k
R6

10k
R7

S
Q1

GND

PMC_EN

D4
LED

R8
1k

GND

PMC_EN=1 : PMC=OB = Charging

+5V
L1
10u
U3

D2
D

Vdrive

C3

PMC_EN

AP2005

5 VIN SW 1
4 EN FB 3
2 GND

R1
39k

R2
10k

C4
4.7u

10u

GND

for AP2004
R1=19xR2(12V) / 33xR2(20V)
R2=10k, R2=190k / 330k

for LM2733
R1=8.76xR2(12V) / 15.3xR2(20V)
R2=10k, R1=87.6k / 150k