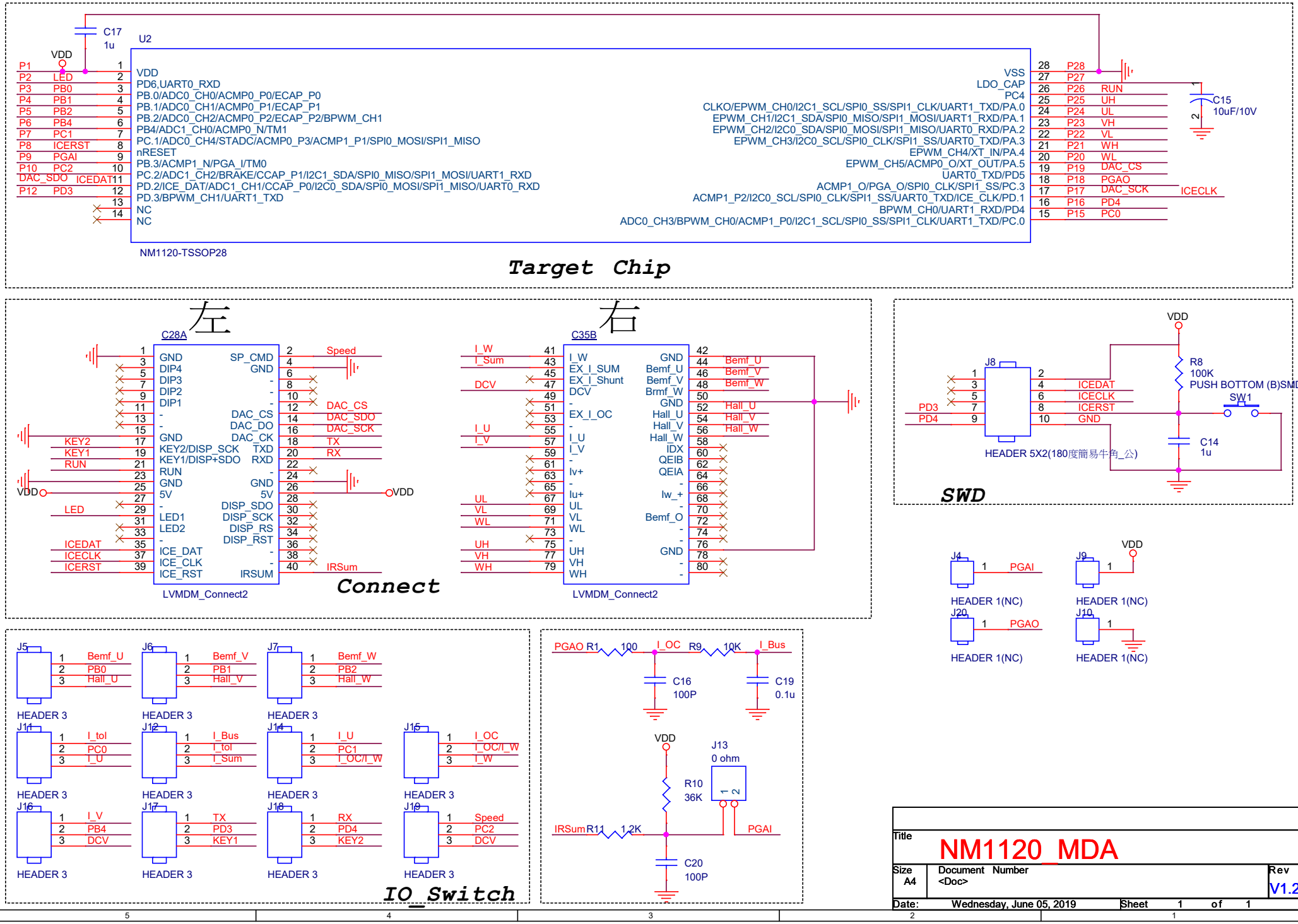
C17
1u
VDD
U2
P1 1
P2 LED 2
P3 PB0 3
P4 PB1 4
P5 PB2 5
P6 PB4 6
P7 PC1 7
P8 ICERST 8
P9 PGAI 9
P10 PC2 10
DAC_SDO ICEDAT 11
P12 PD3 12
13
14
VDD
PD6,UART0_RXD
PB.0/ADC0_CH0/ACMP0_P0/ECAP_P0
PB.1/ADC0_CH1/ACMP0_P1/ECAP_P1
PB.2/ADC0_CH2/ACMP0_P2/ECAP_P2/BPWM_CH1
PB4/ADC1_CH0/ACMP0_N/TM1
PC.1/ADC0_CH4/STADC/ACMP0_P3/ACMP1_P1/SPI0_MOSI/SPI1_MISO
nRESET
PB.3/ACMP1_N/PGA_I/TM0
PC.2/ADC1_CH2/BRAKE/CCAP_P1/I2C1_SDA/SPI0_MISO/SPI1_MOSI/UART1_RXD
PD.2/ICE_DAT/ADC1_CH1/CCAP_P0/I2C0_SDA/SPI0_MOSI/SPI1_MISO/UART0_RXD
PD.3/BPWM_CH1/UART1_TXD
NC
NC
VSS
LDO_CAP
PC4
CLKO/EPWM_CH0/I2C1_SCL/SPI0_SS/SPI1_CLK/UART1_TXD/PA.0
EPWM_CH1/I2C1_SDA/SPI0_MISO/SPI1_MOSI/UART1_RXD/PA.1
EPWM_CH2/I2C0_SDA/SPI0_MOSI/SPI1_MISO/UART0_RXD/PA.2
EPWM_CH3/I2C0_SCL/SPI0_CLK/SPI1_SS/UART0_TXD/PA.3
EPWM_CH4/XT_IN/PA.4
EPWM_CH5/ACMP0_O/XT_OUT/PA.5
UART0_TXD/PD5
ACMP1_O/PGA_O/SPI0_CLK/SPI1_SS/PC.3
ACMP1_P2/I2C0_SCL/SPI0_CLK/SPI1_SS/UART0_TXD/ICE_CLK/PD.1
BPWM_CH0/UART1_RXD/PD4
ADC0_CH3/BPWM_CH0/ACMP1_P0/I2C1_SCL/SPI0_SS/SPI1_CLK/UART1_TXD/PC.0
28 P28
27 P27
26 P26 RUN
25 P25 UH
24 P24 UL
23 P23 VH
22 P22 VL
21 P21 WH
20 P20 WL
19 P19 DAC_CS
18 P18 PGAO
17 P17 DAC_SCK
16 P16 PD4
15 P15 PC0
ICECLK
C15
10uF/10V
NM1120-TSSOP28
Target Chip
左
C28A
1 GND
3 DIP4
5 DIP3
7 DIP2
9 DIP1
11
13 -
15 -
GND KEY2 17
KEY2/DISP_SCK KEY1 19
KEY1/DISP+SDO RUN 21
RUN 23
GND 25
5V 27
- LED 29
LED1 31
LED2 33
- ICEDAT 35
ICE_DAT ICECLK 37
ICE_CLK ICERST 39
ICE_RST
SP_CMD 2 Speed
GND 4
6
- 8
- 10
- 12 DAC_CS
DAC_CS 14 DAC_SDO
DAC_DO 16 DAC_SCK
DAC_CK 18 TX
TXD 20 RX
RXD 22
- 24
GND 26 VDD
5V 28
DISP_SDO 30
DISP_SCK 32
DISP_RS 34
DISP_RST 36
- 38
- 40 IRSum
IRSUM
VDD
LVMDM_Connect2
Connect
右
C35B
I_W 41
I_Sum 43
45
DCV 47
49
51
53
I_U 55
I_V 57
59
61
63
65
UL 67
VL 69
WL 71
73
UH 75
VH 77
WH 79
I_W
EX_I_SUM
EX_I_Shunt
DCV
-
EX_I_OC
-
I_U
I_V
-
Iv+
-
Iu+
UL
VL
WL
-
UH
VH
WH
GND 42
Bemf_U 44 Bemf_U
Bemf_V 46 Bemf_V
Brmf_W 48 Bemf_W
GND 50
Hall_U 52 Hall_U
Hall_V 54 Hall_V
Hall_W 56 Hall_W
IDX 58
QEIB 60
QEIA 62
- 64
Iw_+ 66
- 68
Bemf_O 70
- 72
- 74
GND 76
78
- 80
LVMDM_Connect2
VDD
J8
1 2
3 4 ICEDAT
5 6 ICECLK
PD3 7 8 ICERST
PD4 9 10 GND
HEADER 5X2(180度簡易牛角_公)
R8
100K
PUSH BOTTOM (B)SMD
SW1
C14
1u
SWD
J4 1 PGAI
HEADER 1(NC)
J9 1
HEADER 1(NC)
VDD
J20 1 PGAO
HEADER 1(NC)
J10 1
HEADER 1(NC)
J5 1 Bemf_U 2 PB0 3 Hall_U
HEADER 3
J6 1 Bemf_V 2 PB1 3 Hall_V
HEADER 3
J7 1 Bemf_W 2 PB2 3 Hall_W
HEADER 3
J11 1 I_tol 2 PC0 3 I_U
HEADER 3
J12 1 I_Bus 2 I_tol 3 I_Sum
HEADER 3
J14 1 I_U 2 PC1 3 I_OC/I_W
HEADER 3
J15 1 I_OC 2 I_OC/I_W 3 I_W
HEADER 3
J16 1 I_V 2 PB4 3 DCV
HEADER 3
J17 1 TX 2 PD3 3 KEY1
HEADER 3
J18 1 RX 2 PD4 3 KEY2
HEADER 3
J19 1 Speed 2 PC2 3 DCV
HEADER 3
IO_Switch
PGAO R1 100 I_OC R9 10K I_Bus
C16
100P
C19
0.1u
VDD
J13
0 ohm
R10
36K
IRSum R11 1.2K PGAI
C20
100P
Title
NM1120_MDA
Size
A4
Document Number
<Doc>
Rev
V1.2
Date: Wednesday, June 05, 2019
Sheet 1 of 1