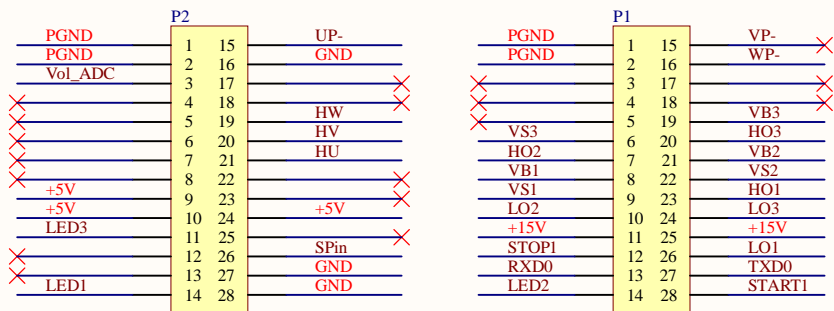
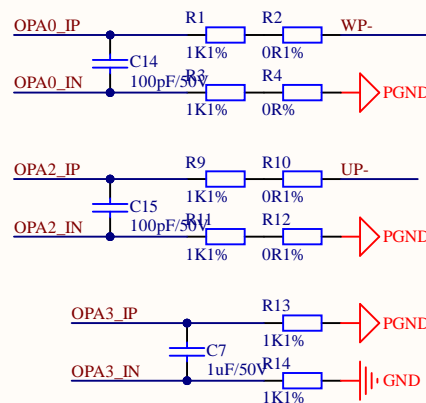


接插件



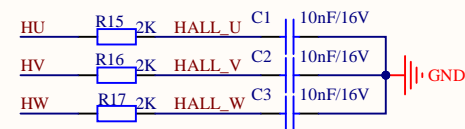
电流采样

如果需要进行MOS内阻采样, 需要电阻改为20K

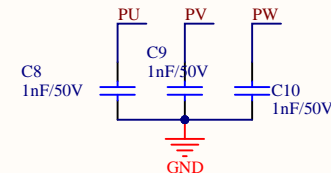


如果需要进行单电阻采样, 需要将电容从1uF改为1nF

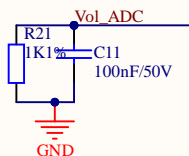
A、B、C霍尔口



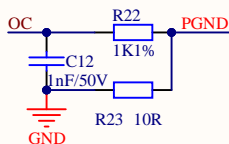
A、B、C反电动势检测



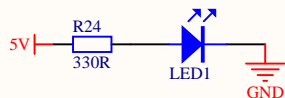
母线电压采样



短路保护



指示灯



MCU

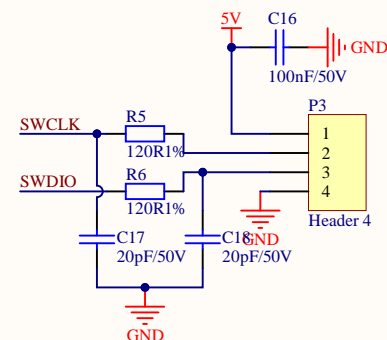
U1			
PU	41	VEM3	AVDD/LDO
PV	42	VEM2	GND
PW	43	VEM1	SWCLK/P2.14
GND	44	PGND	SWDIO/P2.15
LO3	45	LO3	UART0_RXD/ADC01_CH4/DAC0_OUT/P0.0
LO2	46	LO2	RSTN/P0.2/UART1_TXD/TIM3_CH1/OSC_OUT/P3.9
LO1	47	LO1	TIM2_CH0/ADC01_CH7/P0.3/UART1_RXD/SPI_DO/TIM3_CH0/OSC_IN/P2.8
VS1	48	VS1	MCPWM_CH4N/SDA/TIM2_CH1/ADC01_CH8/P0.4
HO1	1	HO1	HALL_IN0/ADC01_CH9/P0.5/HALL_IN1/UART1_RXD/SCL/TIM1_CH0/CAN_RX/CMP2_IP0/P0.6
VB1	2	VB1	HALL_IN2/UART1_TXD/SDA/TIM1_CH1/CAN_TX/CMP2_IP0/P0.7
+15V	3	VCC	HALL_IN0/TIM3_CH0/ADC1_CH11/CMP0_IP1/P0.11
VS2	4	VS2	HALL_IN1/TIM3_CH1/CAN_RX/ADC1_CH12/CMP0_IP2/P0.12
HO2	5	HO2	HALL_IN2/CAN_TX/ADC1_CH13/CMP0_IP3/P0.13
VB2	6	VB2	CMP0_OUT/UART0_TXD/SPI_CLK/SCL/TIM0_CH1/SIF/ADC0_CH10/CMP0_IP4/P0.14
VS3	7	VS3	CMP2_OUT/MCPWM_CH0P/UART0_RXD/SPI_DO/SDA/TIM0_CH0/CMP0_IP/P0.15
HO3	8	HO3	SPI_CLK/ADC1_CH10/CMP1_IP0/P2.1/CMP1_OUT/SPI_CS/TIM0_CH1/P2.3
VB3	9	VB3	HALL_IN0/MCPWM_CH2P/UART1_RXD/SPI_CLK/TIM1_CH0/TIM2_CH0/CAN_RX/CMP1_IP1/P2.4
EN	10	EN	UART0_TXD/TIM0_CH0/TIM3_CH1/CAN_TX/ADC0_CH11/OPAx_OUT/LDO15/REF/P2.7
OPA0_IN	37	OPA0_IN	MCPWM_CH5P/SPI_DI/ADC0_CH12/CMP0_IP/P2.9
OPA0_IP	36	OPA0_IP	MCPWM_CH5N/SPI_DO/SDA/P2.10
OPA2_IN	12	OPA2_IN	MCPWM_CH1P/TIM2_CH0/CMP2_IP1/P2.11
OPA2_IP	11	OPA2_IP	MCPWM_CH1N/SPI_CS/TIM2_CH1/P2.12
OPA3_IN	15	OPA3_IN	TIM1_CH1/TIM2_CH1/CAN_TX/CMP1_IP2/P2.5/TIM3_CH0/CMP1_IP3/P2.6/SCL/TIM3_CH1/P2.13
OPA3_IP	16	OPA3_IP	MCPWM_CH0N/UART0_TXD/SPI_DI/P1.0/TIM3_CH1/ADC01_CH5/P1.3

LKS32MC071DOC8T8

V2.0到V3.0的改动: 复位电路电阻从20K变为10K;
相电流采样电阻从20K和20K串联变为1K和0K串联。额外加入滤波电容100pF
母线电流采样电路中的滤波电容从1nF改为1uF
SWD接口加入滤波电路

V3.0->V3.1:修正MCU封装PIN41-43引脚定义

烧录口



凌鸥创芯

LINKO SEMICONDUCTOR

Project Name			LKS_EVB_MCU071DQ_V3. 1. Prj Pcb
Variant Name			[Nb Vari at ions]
Size	Document Name	Revision	
A4	LKS_EVB_MCU071DQ_V3. 1. SchDoc	*	
Data	*	Sheet 1	of 1
2026/ 6/ 10 14: 57: 15			



凌鸥创芯

LINKO SEMICONDUCTOR



U1

C13

C14

R3

R4

R1

R2

R16

R15

R14

R13

R12

R11

R10

R9

R8

R7

R6

R5

R4

R3

R2

R1

C18

C17

C16

C15

C14

C13

C12

C11

C10

C9

C8

C7

C6

C5

C4

C3

C2

C1

R23

R22

R21

R20

R19

R18

R17

R16

R15

R14

R13

R12

R11

R10

R9

R8

R7

R6

R5

R4

R3

R2

R1

C23

C22

C21

C20

C19

C18

C17

C16

C15

C14

C13

C12

C11

C10

C9

C8

C7

C6

C5

C4

C3

C2

C1

R24

R23

R22

R21

R20

R19

R18

R17

R16

R15

R14

R13

R12

R11

R10

R9

R8

R7

R6

R5

R4

R3

R2

R1

C24

C23

C22

C21

C20

C19

C18

C17

C16

C15

C14

C13

C12

C11

C10

C9

C8

C7

C6

C5

C4

C3

C2

C1

R25

R24

R23

R22

R21

R20

R19

R18

R17

R16

R15

R14

R13

R12

R11

R10

R9

R8

R7

R6

R5

R4

R3

R2

R1

C25

C24

C23

C22

C21

C20

C19

C18

C17

C16

C15

C14

C13

C12

C11

C10

C9

C8

C7

C6

C5

C4

C3

C2

C1

R26

R25

R24

R23

R22

R21

R20

R19

R18

R17

R16

R15

R14

R13

R12

R11

R10

R9

R8

R7

R6

R5

R4

R3

R2

R1

Comment	Description	Designator	Footprint	LibRef	Quantity
10nF/16V	Capacitor	C1, C2, C3	0603C	CAP	3
10uF/25V	Capacitor	C4	0603C	C	1
100nF/50V	Capacitor	C5, C6, C11, C16	0603C	C	4
1uF/50V	Capacitor	C7	0603C	C	1
1nF/50V	Capacitor	C8, C9, C10, C12	0603C	CAP, C	4
1uF/16V	Capacitor	C13	0603C	C	1
100pF/50V	Capacitor	C14, C15	0603C	C	2
20pF/50V	Capacitor	C17, C18	0603C	C	2
LED	LED_Light	LED1	LED 0603R	LED	1
Header 14X2A	Header, 14-Pin, Dual row	P1, P2	HDR 2X14 顶层	Header 14X2A	2
Header 4	Header, 4-Pin	P3	HDR 1X4	Header 4	1
1K1%	Resistor	R1, R3, R9, R11, R13, R14, R21, R22	0603R	Res	8
0R1%	Resistor	R2, R10, R12	0603R	Res	3
0R%	Resistor	R4	0603R	Res	1
120R1%	Resistor	R5, R6	0603R	Res	2
2K	Resistor	R15, R16, R17	0603R	Res	3
10R	Resistor	R23	0603R	Res	1
330R	Resistor	R24	0603R	Res	1
10K1%	Resistor	R27	0603R	Res	1
LKS32MC071DOC8T8	芯片	U1	TQFP48	LKS32MC071DOC8T8	1