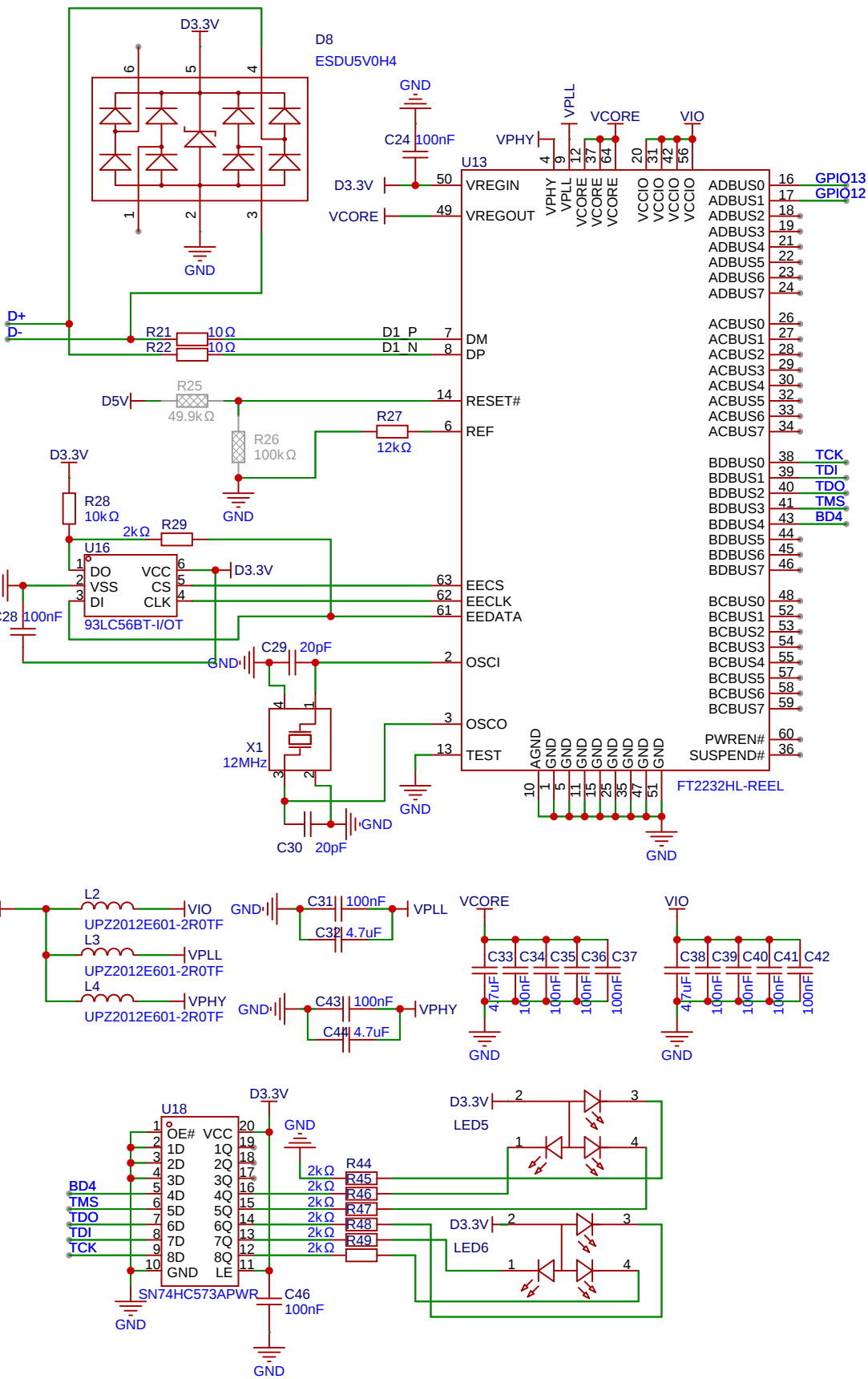
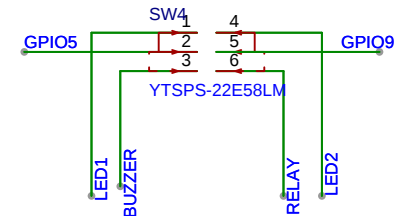




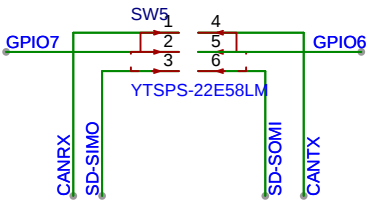
JTAG模块



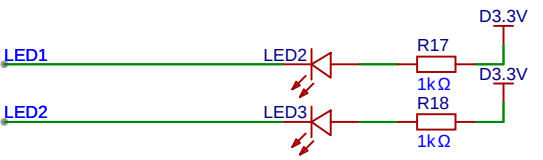
ON:BUZ  
OFF:LED,R/D



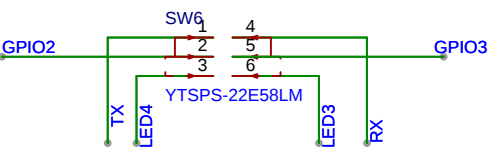
ON:SD卡  
OFF:CAN



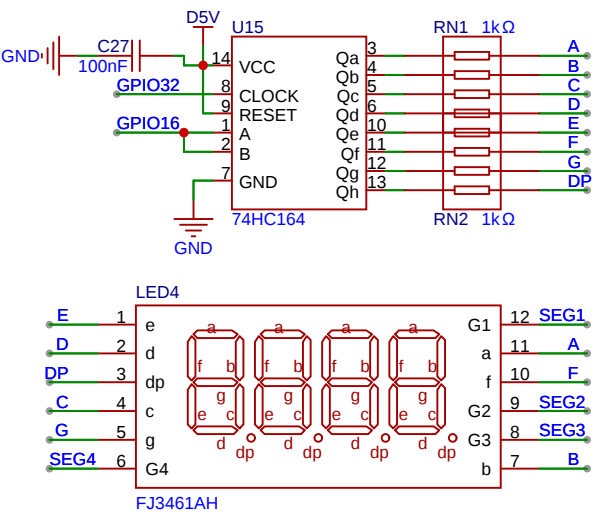
LED模块



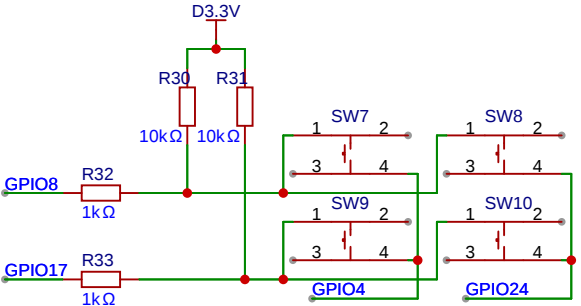
ON:数码管  
OFF:通讯



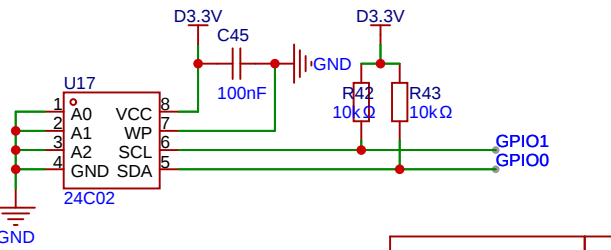
数码管显示模块



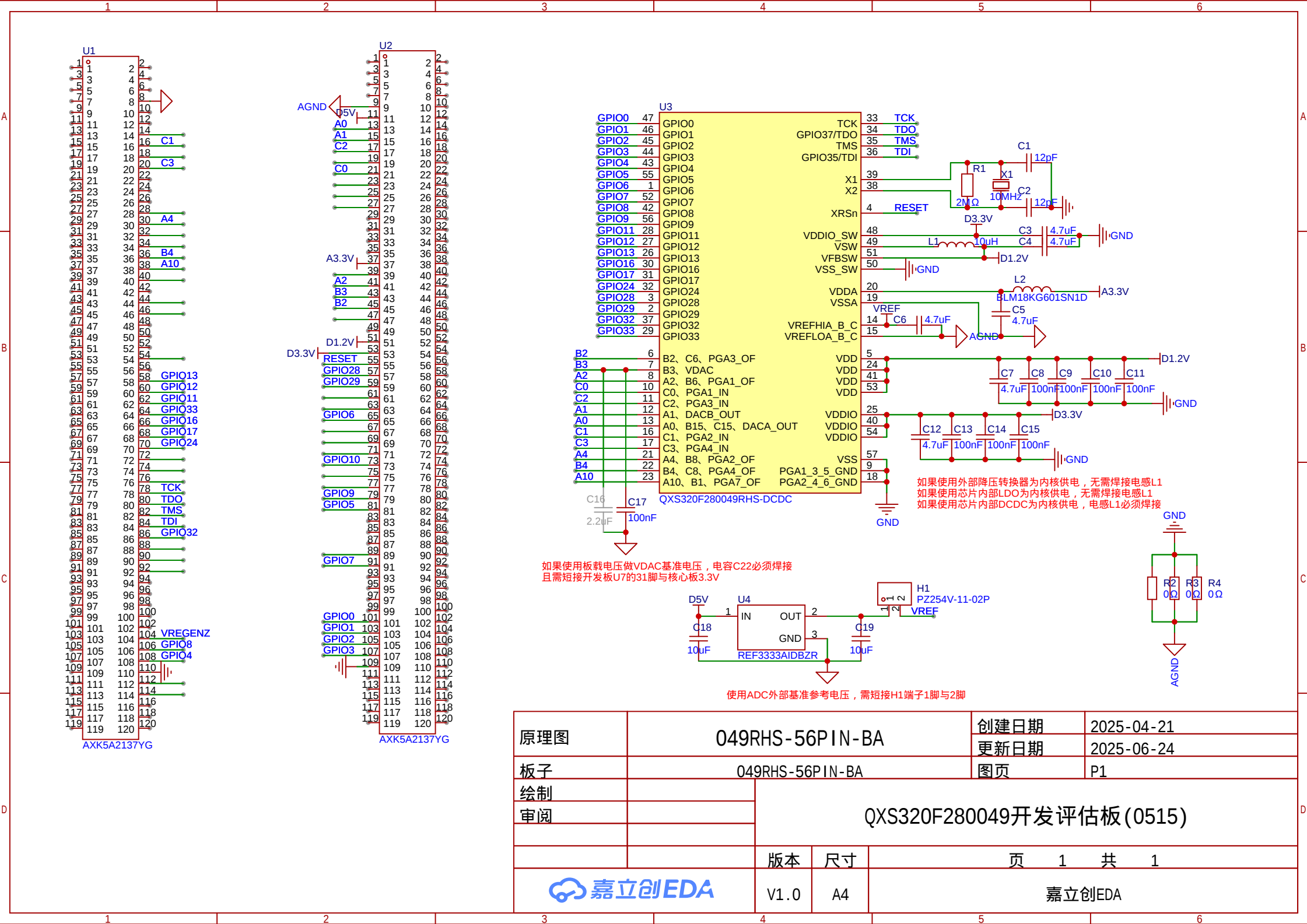
矩阵按键模块



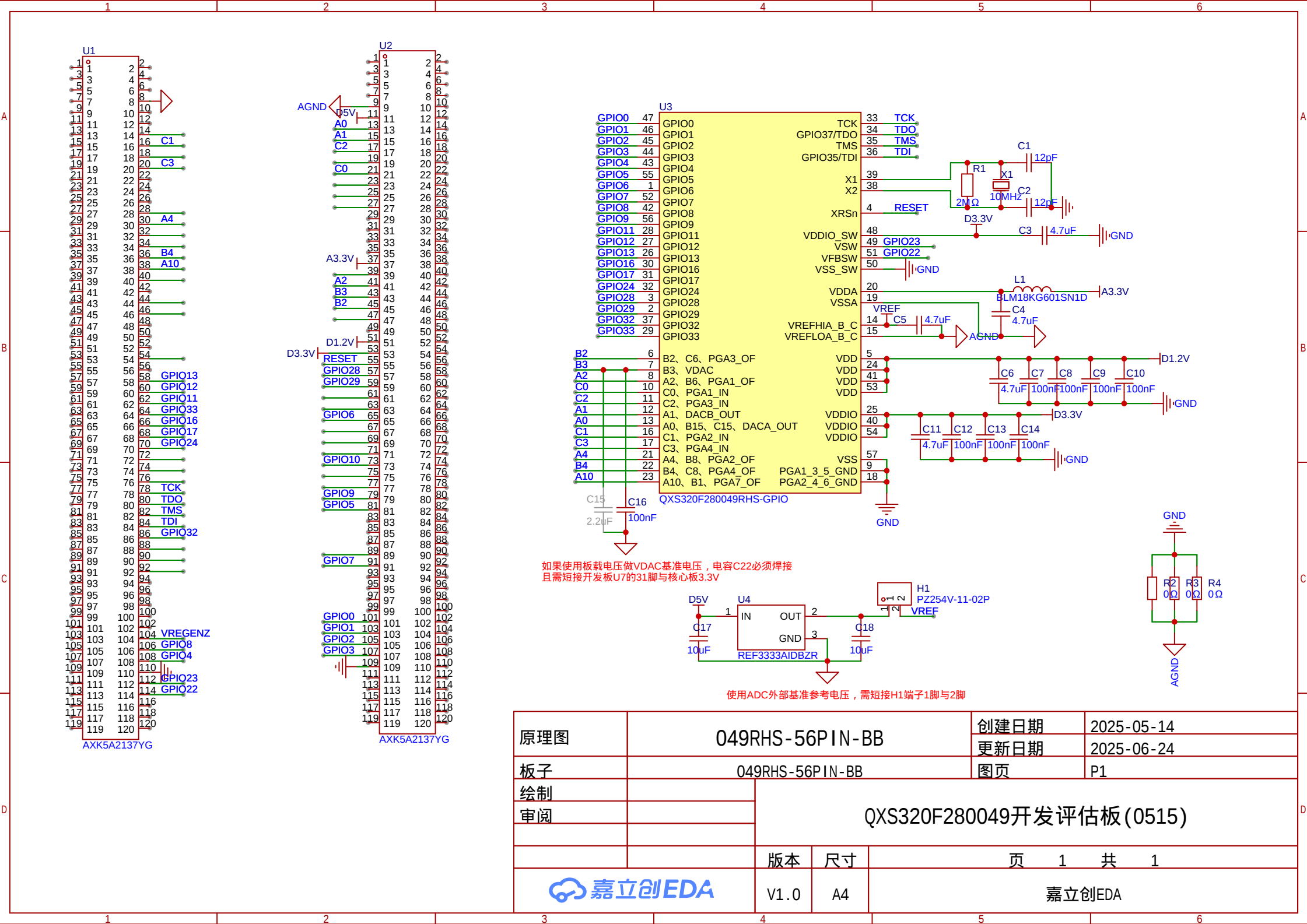
EEPROM模块



|        |                          |      |         |            |
|--------|--------------------------|------|---------|------------|
| 原理图    | 开发板底板                    |      | 创建日期    | 2025-04-22 |
| 板子     | 049开发板                   |      | 更新日期    | 2025-06-09 |
| 绘制     | QXS320F280049开发评估板(0515) |      | 图页      | P2         |
| 审阅     |                          |      |         |            |
|        | 版本                       | 尺寸   | 页 2 共 2 |            |
| 嘉立创EDA |                          | V1.0 | A4      | 嘉立创EDA     |



|                                                                                      |                 |                          |    |        |            |
|--------------------------------------------------------------------------------------|-----------------|--------------------------|----|--------|------------|
| 原理图                                                                                  | 049RHS-56PIN-BA |                          |    | 创建日期   | 2025-04-21 |
|                                                                                      |                 |                          |    | 更新日期   | 2025-06-24 |
| 板子                                                                                   | 049RHS-56PIN-BA |                          |    | 图页     | P1         |
| 绘制                                                                                   |                 | QXS320F280049开发评估板(0515) |    |        |            |
| 审阅                                                                                   |                 |                          |    |        |            |
|                                                                                      |                 |                          |    |        |            |
|                                                                                      |                 | 版本                       | 尺寸 | 页      | 1 共 1      |
|  |                 | V1.0                     | A4 | 嘉立创EDA |            |

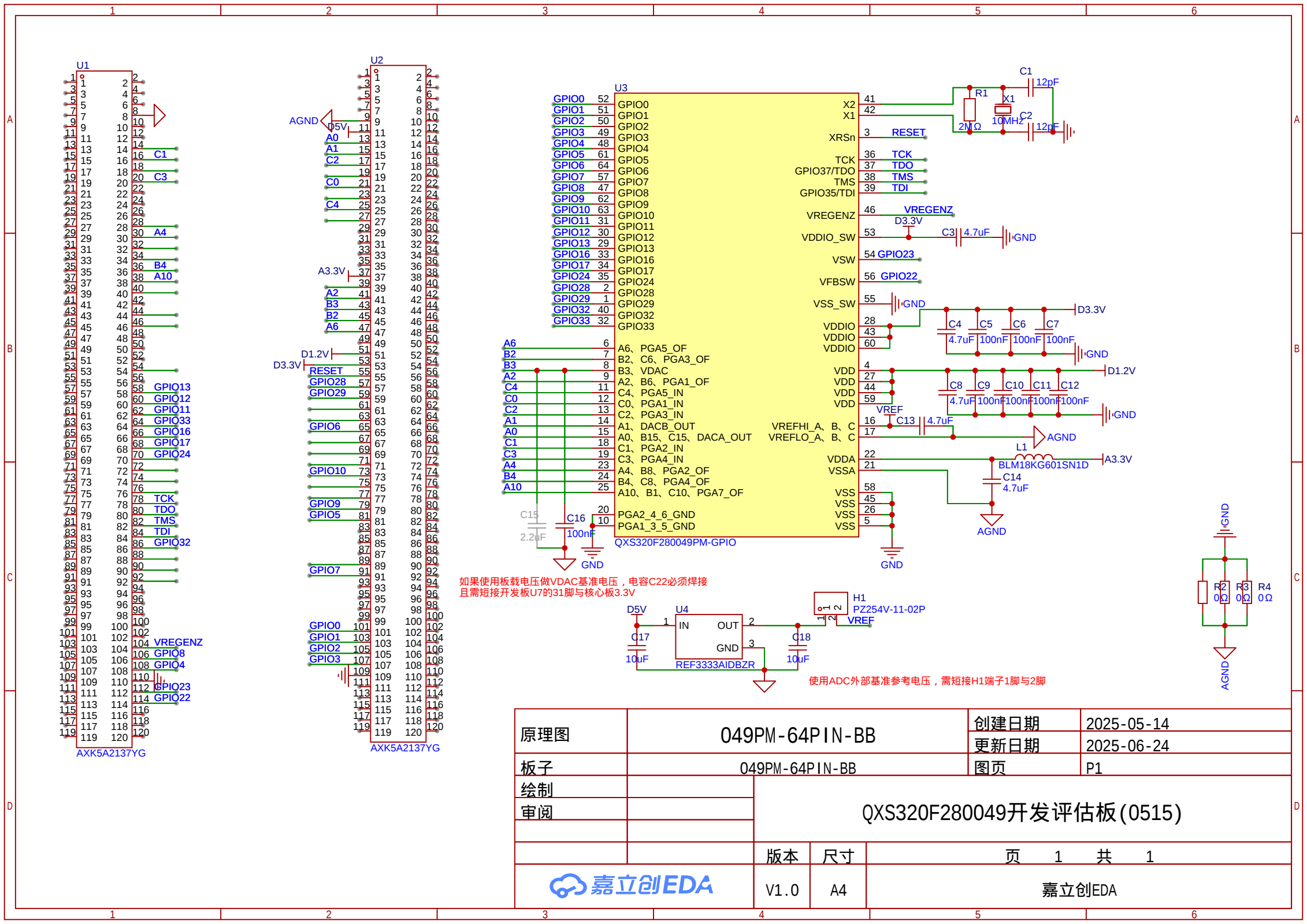


如果使用板载电压做VDAC基准电压，电容C22必须焊接  
且需短接开发板U7的31脚与核心板3.3V

使用ADC外部基准参考电压，需短接H1端子1脚与2脚

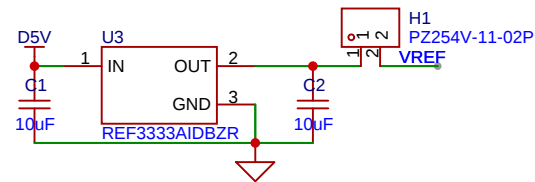
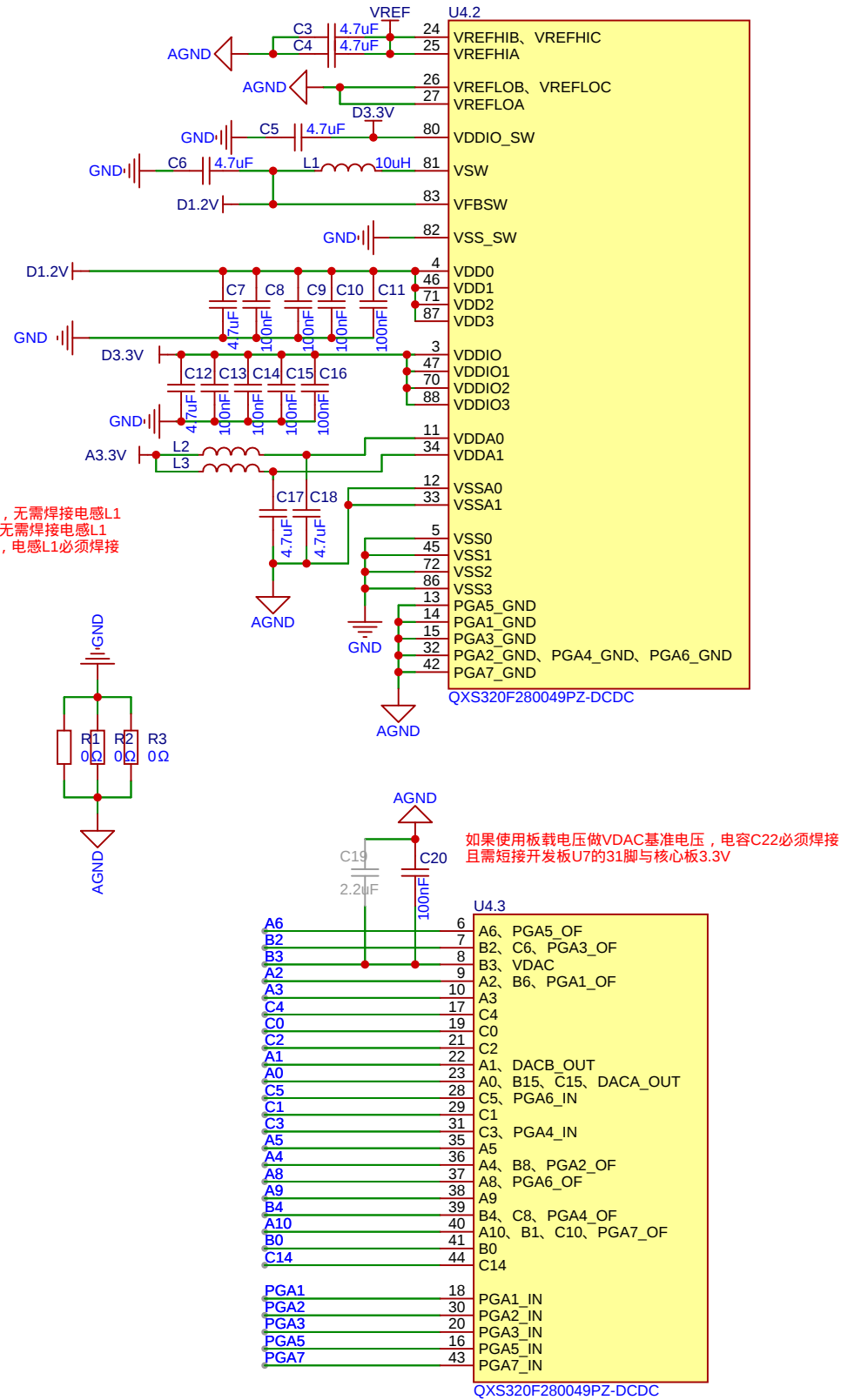
|                                                                                      |                          |  |      |            |                     |
|--------------------------------------------------------------------------------------|--------------------------|--|------|------------|---------------------|
| 原理图                                                                                  | 049RHS-56PIN-BB          |  | 创建日期 | 2025-05-14 |                     |
|                                                                                      |                          |  | 更新日期 | 2025-06-24 |                     |
| 板子                                                                                   | 049RHS-56PIN-BB          |  | 图页   | P1         |                     |
| 绘制                                                                                   | QXS320F280049开发评估板(0515) |  |      |            |                     |
| 审阅                                                                                   |                          |  |      |            |                     |
|                                                                                      |                          |  |      |            |                     |
|                                                                                      |                          |  | 版本   | 尺寸         | 页     1     共     1 |
|  |                          |  | V1.0 | A4         | 嘉立创EDA              |





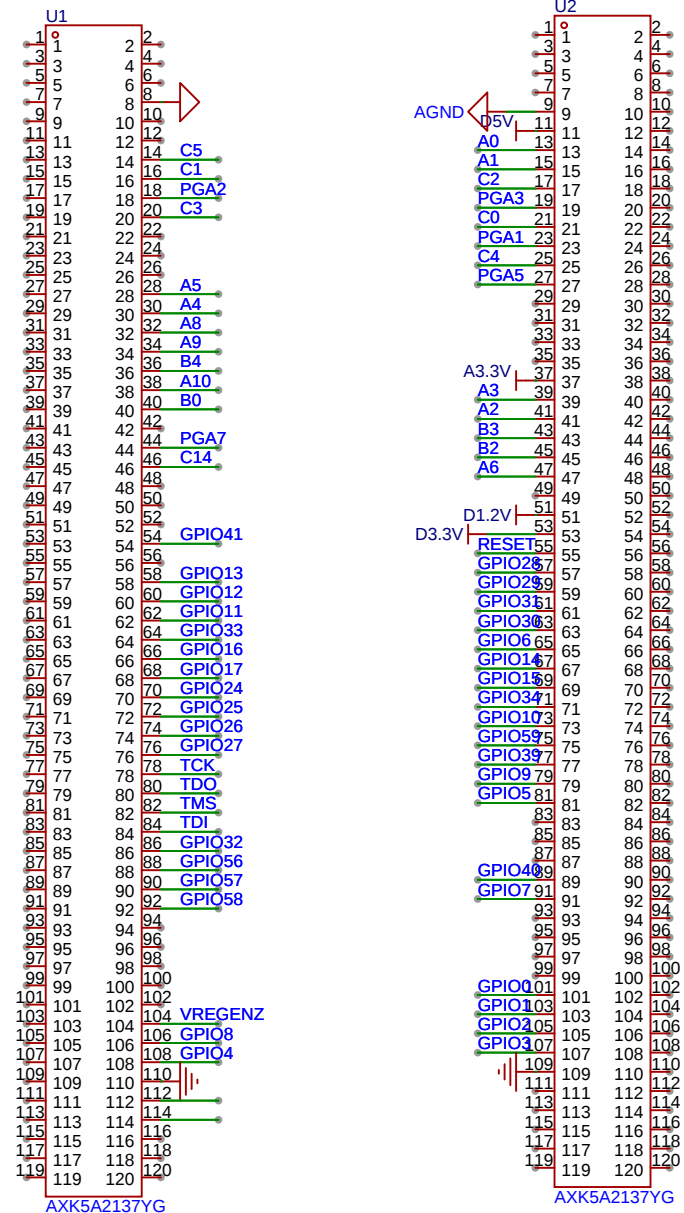
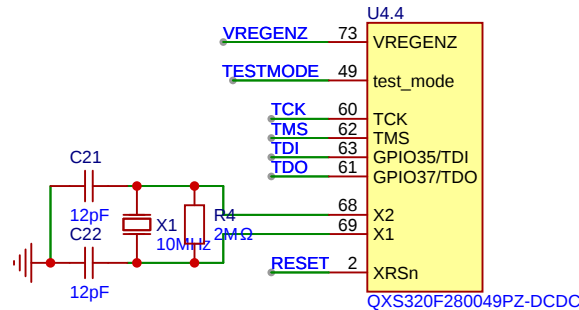
|                                                                                      |                          |      |      |            |                     |
|--------------------------------------------------------------------------------------|--------------------------|------|------|------------|---------------------|
| 原理图                                                                                  | 049PM-64PIN-BB           |      | 创建日期 | 2025-05-14 |                     |
|                                                                                      |                          |      | 更新日期 | 2025-06-24 |                     |
| 板子                                                                                   | 049PM-64PIN-BB           |      | 图页   | P1         |                     |
| 绘制                                                                                   | QXS320F280049开发评估板(0515) |      |      |            |                     |
| 审阅                                                                                   |                          |      |      |            |                     |
|                                                                                      |                          |      |      |            |                     |
|                                                                                      |                          |      | 版本   | 尺寸         | 页     1     共     1 |
|  |                          | V1.0 | A4   | 嘉立创EDA     |                     |

如果使用外部降压转换器为内核供电，无需焊接电感L1  
如果使用芯片内部LDO为内核供电，无需焊接电容L1  
如果使用芯片内部DCDC为内核供电，电感L1必须焊接

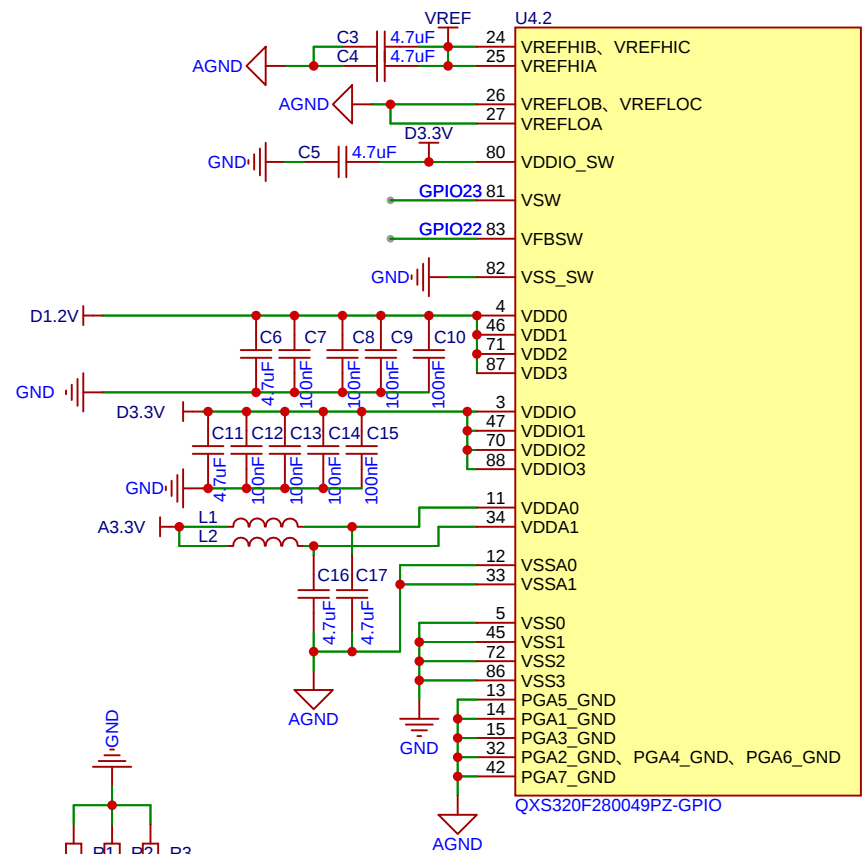


使用ADC外部基准参考电压，需短接H1端子1脚与2脚

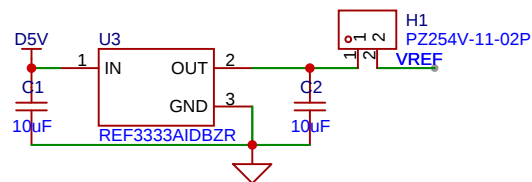
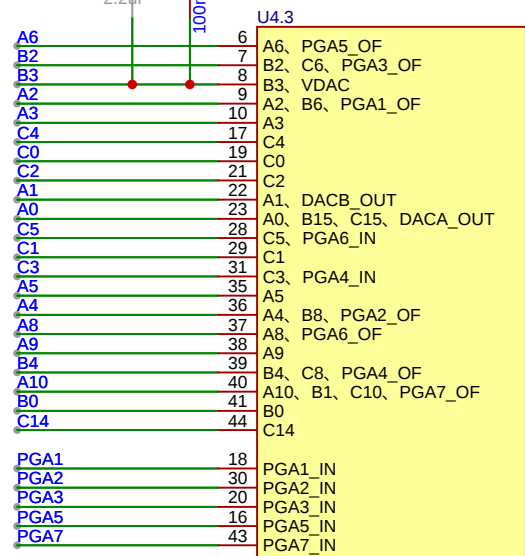
|        |                   |     |        |        |
|--------|-------------------|-----|--------|--------|
| GPIO0  | EPWM1 A           | 79  | GPIO0  | GPIO0  |
| GPIO1  | EPWM1 B           | 78  | GPIO1  | GPIO1  |
| GPIO2  | EPWM2 A           | 77  | GPIO2  | GPIO2  |
| GPIO3  | EPWM2 B           | 76  | GPIO3  | GPIO3  |
| GPIO4  | EPWM3 A           | 75  | GPIO4  | GPIO4  |
| GPIO5  | EPWM3 B           | 89  | GPIO5  | GPIO5  |
| GPIO6  | EPWM4 A/SPIB SOMI | 97  | GPIO6  | GPIO6  |
| GPIO7  | EPWM4 B/SPIB SIMO | 84  | GPIO7  | GPIO7  |
| GPIO8  | EPWM5 A           | 74  | GPIO8  | GPIO8  |
| GPIO9  | EPWM5 B           | 90  | GPIO9  | GPIO9  |
| GPIO10 | EPWM6 A           | 93  | GPIO10 | GPIO10 |
| GPIO11 | EPWM6 B           | 52  | GPIO11 | GPIO11 |
| GPIO12 | EPWM7 A           | 51  | GPIO12 | GPIO12 |
| GPIO13 | EPWM7 B           | 50  | GPIO13 | GPIO13 |
| GPIO14 | EPWM8 A           | 96  | GPIO14 | GPIO14 |
| GPIO15 | EPWM8 B           | 95  | GPIO15 | GPIO15 |
| GPIO16 | SPIA SIMO         | 54  | GPIO16 | GPIO16 |
| GPIO17 | SPIA SCLK         | 55  | GPIO17 | GPIO17 |
| GPIO24 | SCIA TX           | 56  | GPIO24 | GPIO24 |
| GPIO25 | SCIA RX           | 57  | GPIO25 | GPIO25 |
| GPIO26 | I2C SDA           | 58  | GPIO26 | GPIO26 |
| GPIO27 | I2C SCL           | 59  | GPIO27 | GPIO27 |
| GPIO28 | SPIB CLK          | 1   | GPIO28 | GPIO28 |
| GPIO29 | SPIB STE          | 100 | GPIO29 | GPIO29 |
| GPIO30 | CAN RX            | 98  | GPIO30 | GPIO30 |
| GPIO31 | CAN TX            | 99  | GPIO31 | GPIO31 |
| GPIO32 |                   | 64  | GPIO32 | GPIO32 |
| GPIO33 |                   | 53  | GPIO33 | GPIO33 |
| GPIO34 |                   | 94  | GPIO34 | GPIO34 |
| GPIO39 |                   | 91  | GPIO39 | GPIO39 |
| GPIO40 |                   | 85  | GPIO40 | GPIO40 |
| GPIO41 | SPIA CLK          | 48  | GPIO41 | GPIO41 |
| GPIO56 | SCIB TX           | 65  | GPIO56 | GPIO56 |
| GPIO57 | SCIB RX           | 66  | GPIO57 | GPIO57 |
| GPIO58 | SPIB CLK          | 67  | GPIO58 | GPIO58 |
| GPIO59 |                   | 92  | GPIO59 | GPIO59 |



|                                                                                       |                 |                          |            |        |       |
|---------------------------------------------------------------------------------------|-----------------|--------------------------|------------|--------|-------|
| 原理图                                                                                   | 049PZ-100PIN-BA | 创建日期                     | 2025-04-21 |        |       |
|                                                                                       |                 | 更新日期                     | 2025-06-24 |        |       |
| 板子                                                                                    | 049PZ-100PIN-BA | 图页                       | P1         |        |       |
| 绘制                                                                                    |                 | QXS320F280049开发评估板(0515) |            |        |       |
| 审阅                                                                                    |                 |                          |            |        |       |
|                                                                                       |                 |                          |            |        |       |
|                                                                                       |                 | 版本                       | 尺寸         | 页      | 1 共 1 |
|  |                 | V1.0                     | A4         | 嘉立创EDA |       |



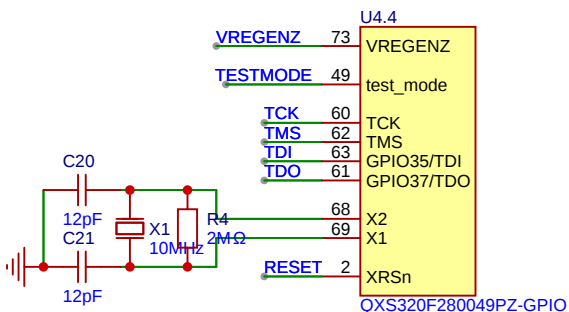
如果使用板载电压做VDAC基准电压，电容C22必须焊接且需短接开发板U7的31脚与核心板3.3V



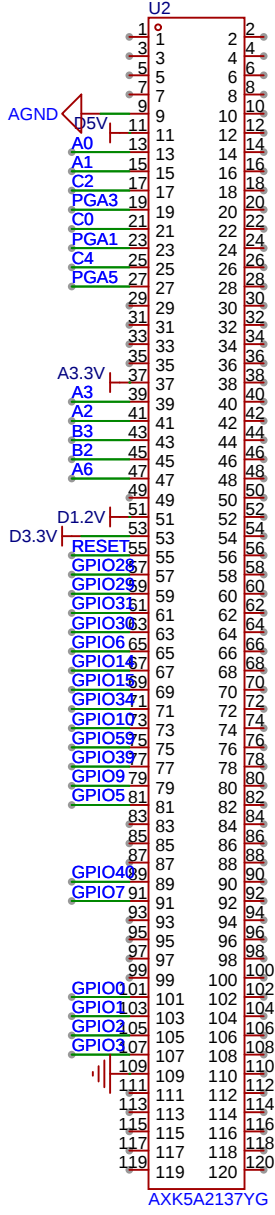
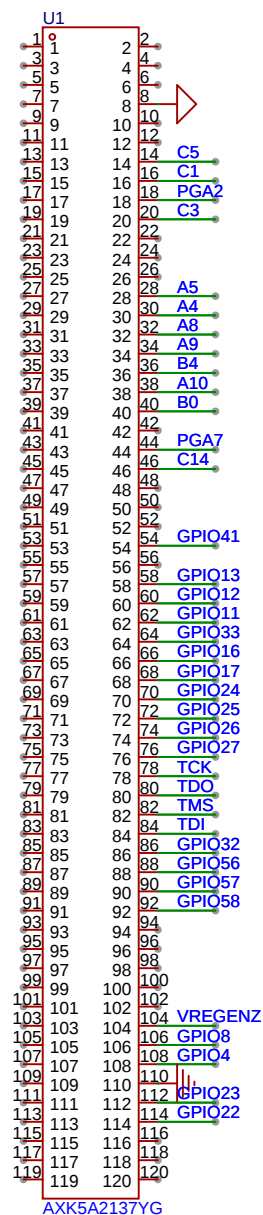
使用ADC外部基准参考电压，需短接H1端子1脚与2脚

|        |                   |     |        |        |
|--------|-------------------|-----|--------|--------|
| GPIO0  | EPWM1 A           | 79  | GPIO0  | GPIO0  |
| GPIO1  | EPWM1 B           | 78  | GPIO1  | GPIO1  |
| GPIO2  | EPWM2 A           | 77  | GPIO2  | GPIO2  |
| GPIO3  | EPWM2 B           | 76  | GPIO3  | GPIO3  |
| GPIO4  | EPWM3 A           | 75  | GPIO4  | GPIO4  |
| GPIO5  | EPWM3 B           | 89  | GPIO5  | GPIO5  |
| GPIO6  | EPWM4 A/SPIB SOMI | 97  | GPIO6  | GPIO6  |
| GPIO7  | EPWM4 B/SPIB SIMO | 84  | GPIO7  | GPIO7  |
| GPIO8  | EPWM5 A           | 74  | GPIO8  | GPIO8  |
| GPIO9  | EPWM5 B           | 90  | GPIO9  | GPIO9  |
| GPIO10 | EPWM6 A           | 93  | GPIO10 | GPIO10 |
| GPIO11 | EPWM6 B           | 52  | GPIO11 | GPIO11 |
| GPIO12 | EPWM7 A           | 51  | GPIO12 | GPIO12 |
| GPIO13 | EPWM7 B           | 50  | GPIO13 | GPIO13 |
| GPIO14 | EPWM8 A           | 96  | GPIO14 | GPIO14 |
| GPIO15 | EPWM8 B           | 95  | GPIO15 | GPIO15 |
| GPIO16 | SPIA SIMO         | 54  | GPIO16 | GPIO16 |
| GPIO17 |                   | 55  | GPIO17 | GPIO17 |
| GPIO24 | SCIA TX           | 56  | GPIO24 | GPIO24 |
| GPIO25 | SCIA RX           | 57  | GPIO25 | GPIO25 |
| GPIO26 | I2C SDA           | 58  | GPIO26 | GPIO26 |
| GPIO27 | I2C SCL           | 59  | GPIO27 | GPIO27 |
| GPIO28 | SPIB CLK          | 1   | GPIO28 | GPIO28 |
| GPIO29 | SPIB STE          | 100 | GPIO29 | GPIO29 |
| GPIO30 | CAN RX            | 98  | GPIO30 | GPIO30 |
| GPIO31 | CAN TX            | 99  | GPIO31 | GPIO31 |
| GPIO32 |                   | 64  | GPIO32 | GPIO32 |
| GPIO33 |                   | 53  | GPIO33 | GPIO33 |
| GPIO34 |                   | 94  | GPIO34 | GPIO34 |
| GPIO39 |                   | 91  | GPIO39 | GPIO39 |
| GPIO40 |                   | 85  | GPIO40 | GPIO40 |
| GPIO41 | SPIA CLK          | 48  | GPIO41 | GPIO41 |
| GPIO56 | SCIB TX           | 65  | GPIO56 | GPIO56 |
| GPIO57 | SCIB RX           | 66  | GPIO57 | GPIO57 |
| GPIO58 | SPIB CLK          | 67  | GPIO58 | GPIO58 |
| GPIO59 |                   | 92  | GPIO59 | GPIO59 |

QXS320F280049PZ-GPIO



QXS320F280049PZ-GPIO



|                                                                                       |                 |                           |            |        |   |   |   |
|---------------------------------------------------------------------------------------|-----------------|---------------------------|------------|--------|---|---|---|
| 原理图                                                                                   | 049PZ-100PIN-BB | 创建日期                      | 2025-05-14 |        |   |   |   |
|                                                                                       |                 | 更新日期                      | 2025-06-24 |        |   |   |   |
| 板子                                                                                    | 049PZ-100PIN-BB | 图页                        | P1         |        |   |   |   |
| 绘制                                                                                    |                 | QXS320F280049开发评估板 (0515) |            |        |   |   |   |
| 审阅                                                                                    |                 |                           |            |        |   |   |   |
|                                                                                       |                 |                           |            |        |   |   |   |
|                                                                                       |                 |                           |            |        |   |   |   |
|                                                                                       |                 | 版本                        | 尺寸         | 页      | 1 | 共 | 1 |
|  |                 | V1.0                      | A4         | 嘉立创EDA |   |   |   |