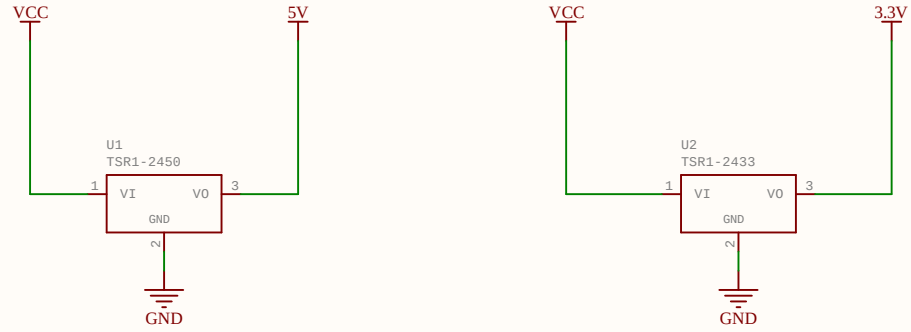
# POWER

Vcc NOMINAL = 24V

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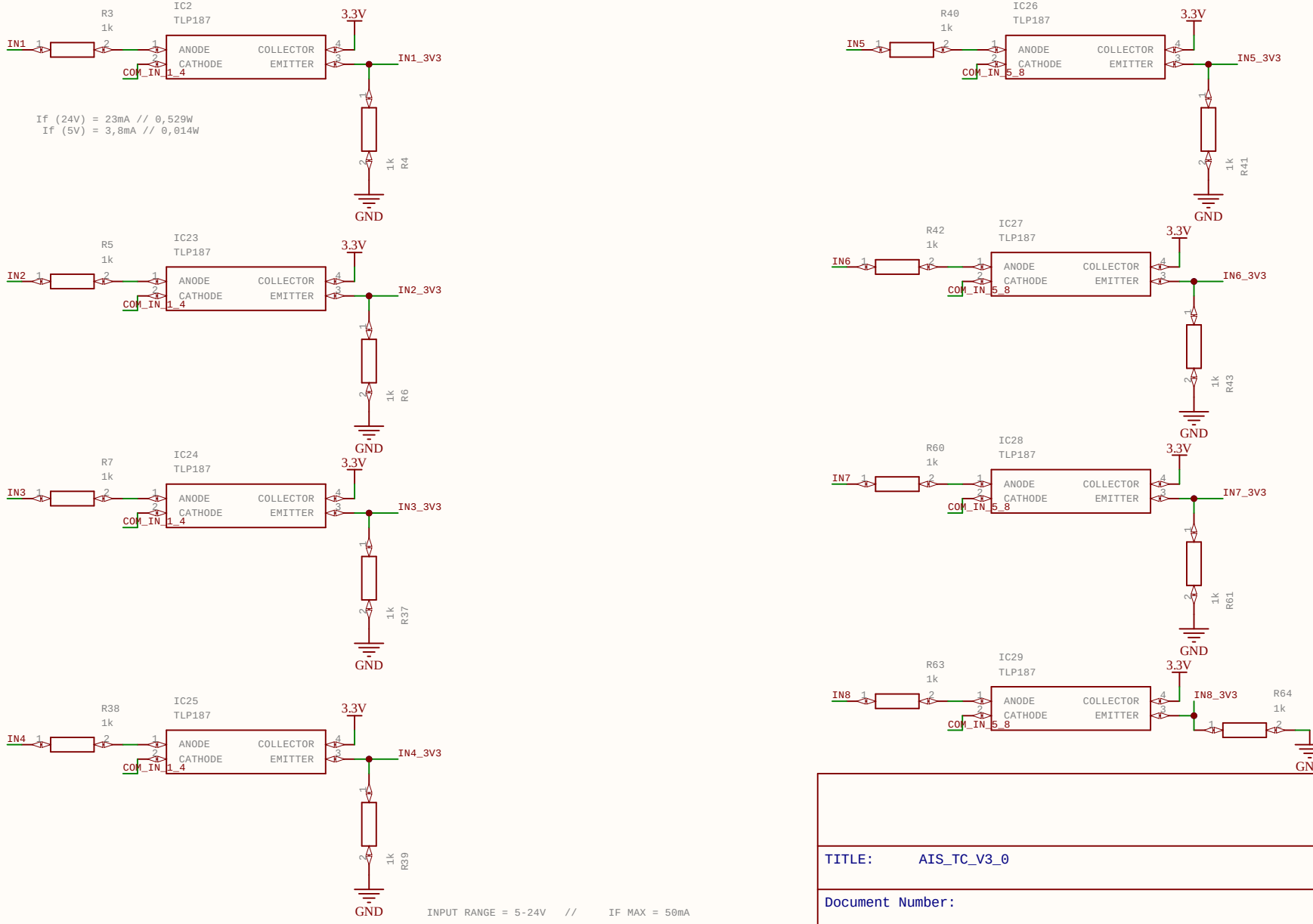
| TITLE: AIS_TC_V3_0 | | |
| Document Number: | | REV: |
| Date: 15/07/2022 12:03:29 | Sheet: 1 | |

# GENERAL INPUTS

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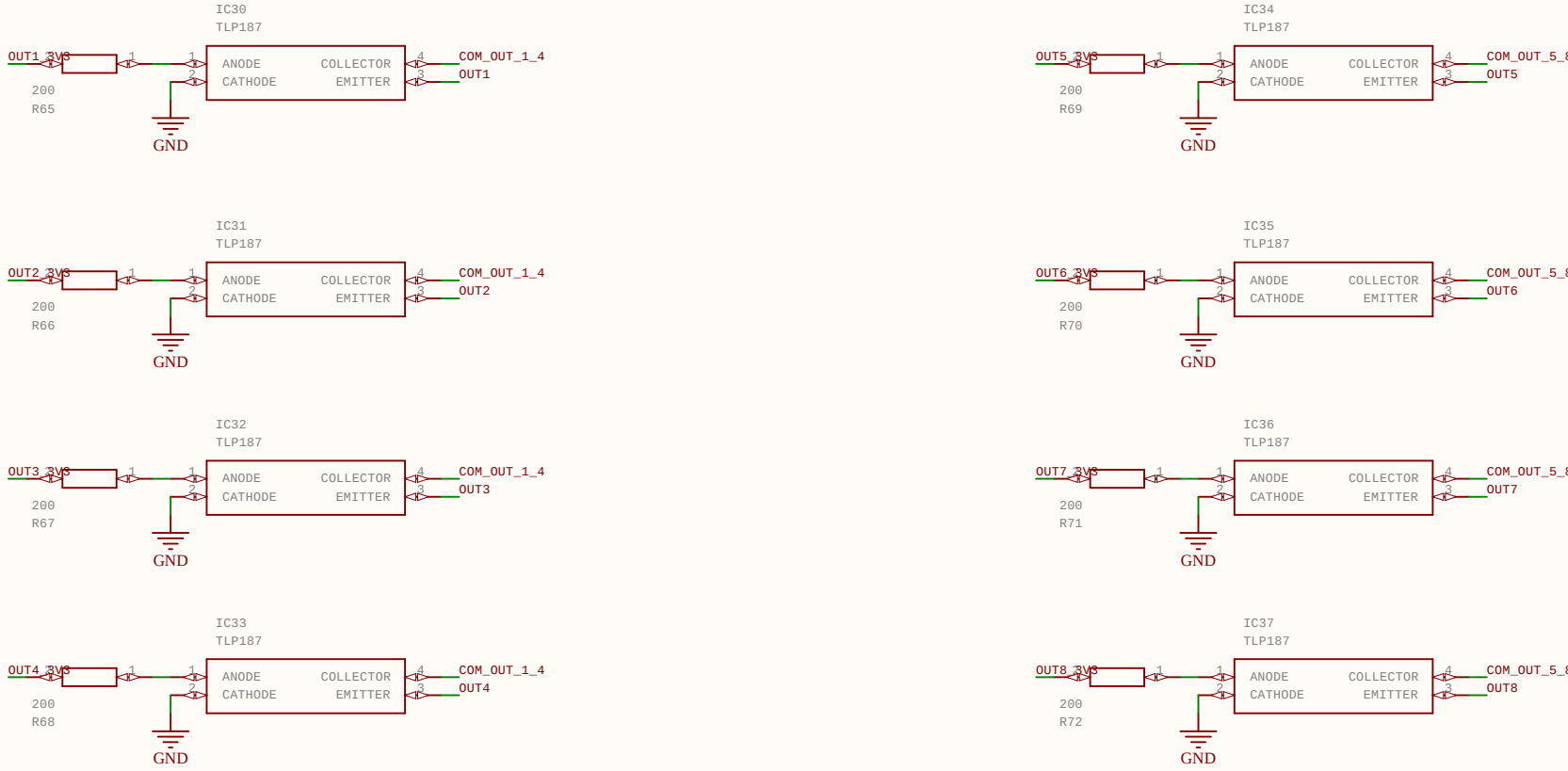
| TITLE: AIS_TC_V3_0 | | |
| Document Number: | | REV: |
| Date: 15/07/2022 12:03:29 | Sheet: 2 | |

# GENERAL OUTPUTS

COM OUT RANGE = 5-24V




Io from FPGA (goes to optocoupler and LED)
Io = 7,4mA (470ohm)
Io = 10,3mA (330ohm)

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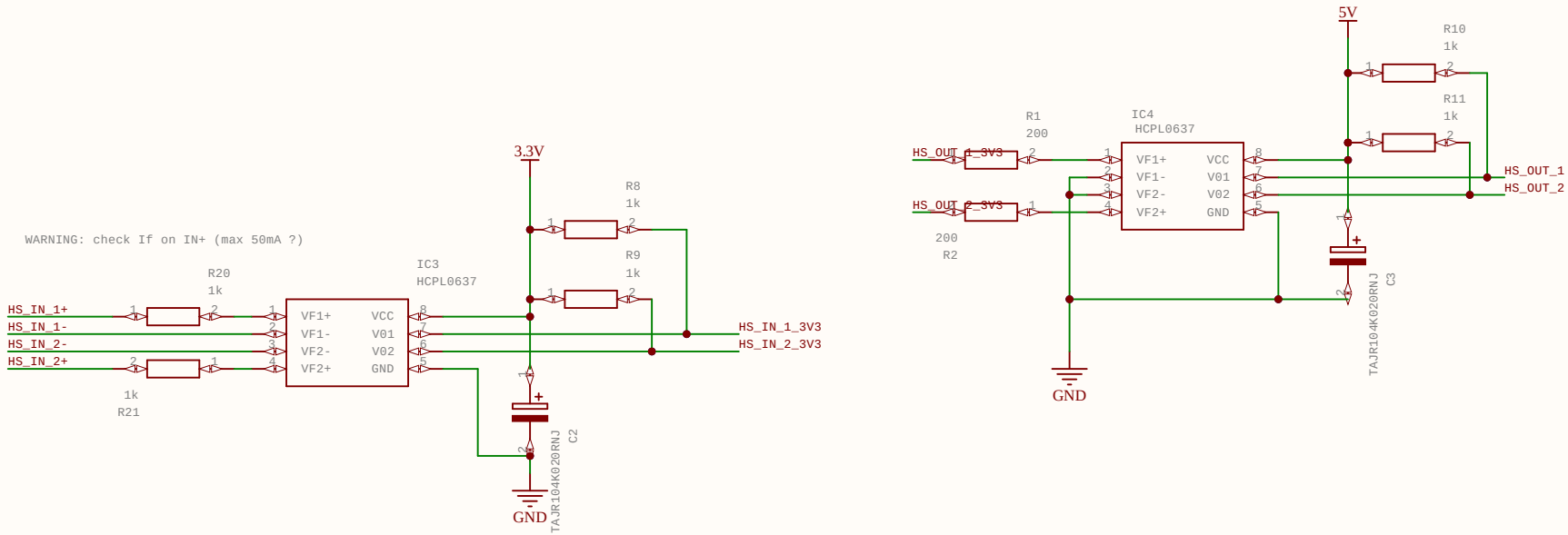
| TITLE: AIS_TC_V3_0 | |
| Document Number: | REV: |
| Date: 15/07/2022 12:03:29 | Sheet: 3 |

# HIGH SPEED I/O




1k anode resistors must be 0,75W(minimum) due to [5-24V] range

Tantalum capacitor 100nF

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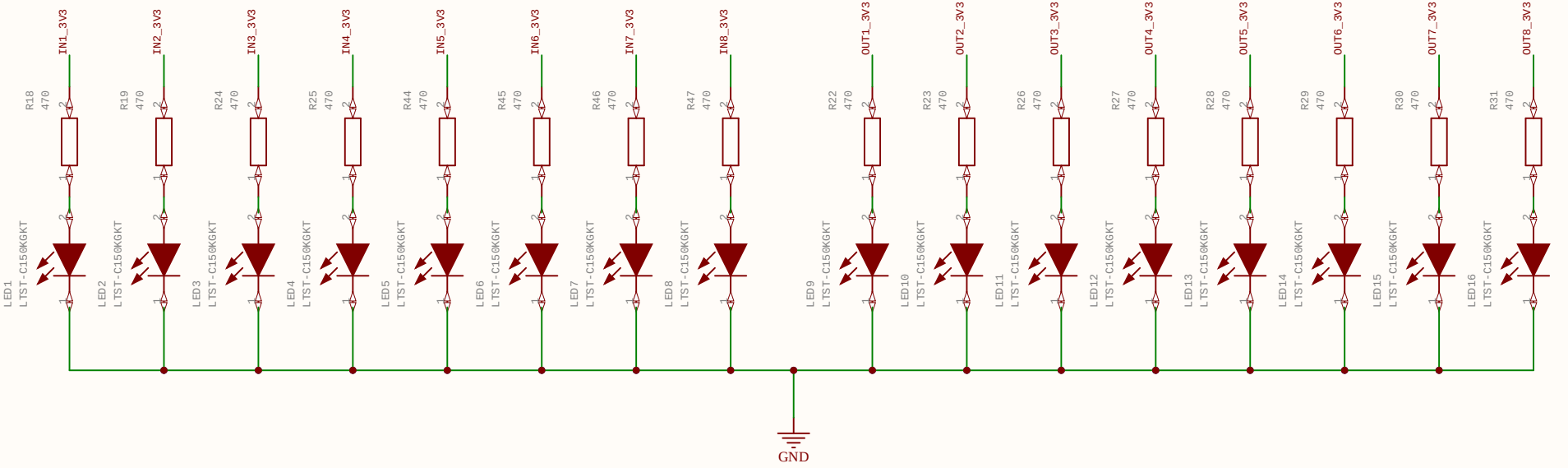
| TITLE: AIS_TC_V3_0 | |
| Document Number: | REV: |
| Date: 15/07/2022 12:03:29 | Sheet: 4 |

# LEDS

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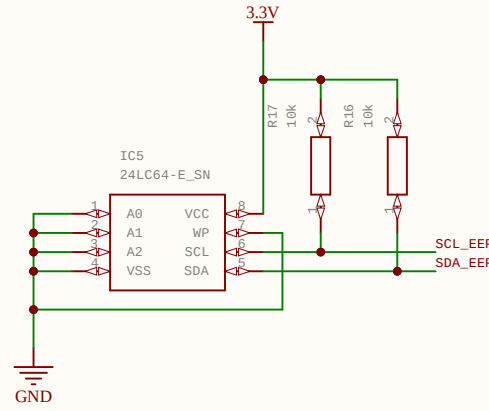
| TITLE: AIS_TC_V3_0 | | |
| Document Number: | | REV: |
| Date: 15/07/2022 12:03:29 | Sheet: 5 | |

# EEPROM

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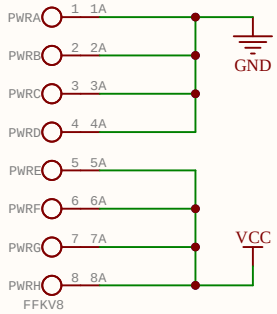
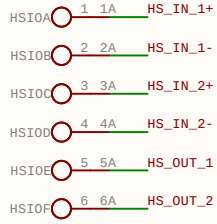
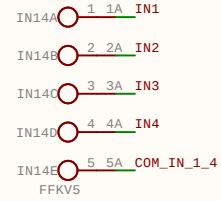
| TITLE: AIS_TC_V3_0 | | |
| Document Number: | | REV: |
| Date: 15/07/2022 12:03:29 | Sheet: 6 | |

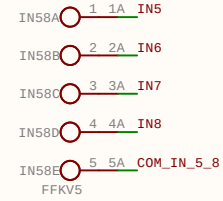
# EXTERNAL CONNECTORS



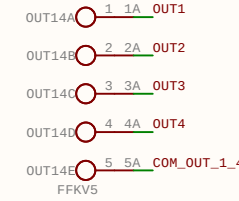



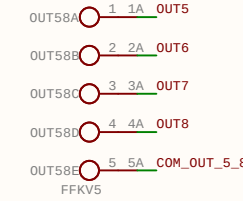

Inputs 1 - 4
Com Inputs 1 - 4



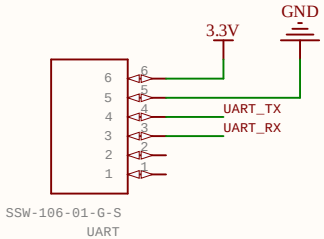

Inputs 5 - 8
Com Inputs 5 - 8

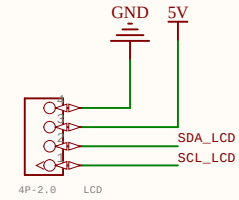



Outputs 1 - 4
Com Outputs 1 - 4

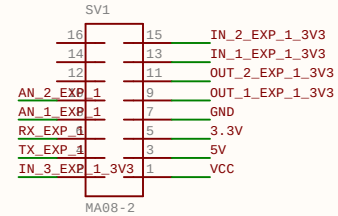



Outputs 5 - 8
Com Outputs 5 - 8

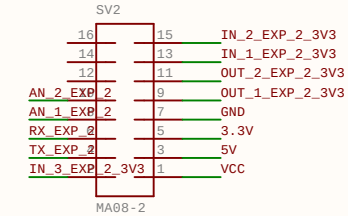



MUST BE THIS CONNECTOR




Expansion connector board 1




Expansion connector board 2

PmodRS232
Pin 1: N/C
Pin 2: N/C
Pin 3: RX
Pin 4: TX
Pin 5: GND
Pin 6: 24

Must be connected in front face
Evaluate MAX3232 in PCB option

EACH EXPANSION BOARD:

24V
5V
3.3V
GND
2 OUTPUTS
3 INPUTS
2 UART (RX TX)
2 AN *

*Only expansion board 1 AN signals will be connected to CMOD A7

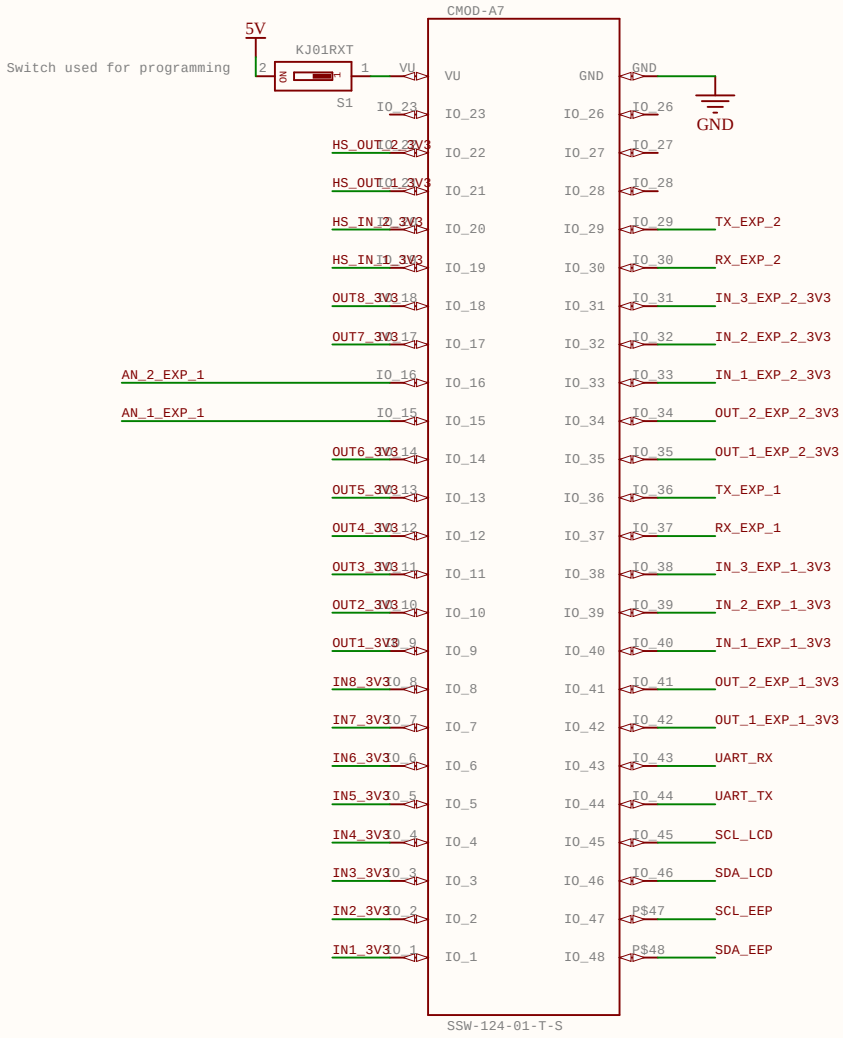
| | | |
|---|---|---|
| TITLE: AIS_TC_V3_0 | | |
| Document Number: | | REV: |
| Date: 15/07/2022 12:03:29 | Sheet: 7 | |

# CMOD A7

Signal pins assignation is only for graphic purpouses. The only signals that MUST be wired at its respective pins are AN_1_EXP_1, AN_2_EXP_1, VCC and GND

CMOD A7 connected to PCB through 2x SSW-124-01-T-S connector (SAMTEC)

CMOD A7  USB connector must be touching top or bottom face




Pin 1-14: Generic IO
Pin 15-16: ANALOG INPUTS range [0-3.3V]
Pin 17-23: Generic IO
Pin 24: Vcc (5V)
Pin 25: GND
Pin 26-48: Generic IO

Total generic IO: 44

SIGNALS:

8 INPUTS
8 OUTPUTS
2 HS INPUTS
2 HS OUTPUTS
2 EEPROM
2 LCD
2 UART (EXTERNAL TX RX)

TOTAL: 26
-------

To/From Expansion board:

2 OUTPUTS
3 INPUTS
2 UART
2 AN *

TOTAL digital IO: 7

*Only expansion board 1 AN signals will be connected to CMOD A7

44 (main board) + 7 (exp board 1) + 7(exp board 2) = 40 pins  /// OK

| | | |
|---|---|---|
| TITLE: AIS_TC_V3_0 | | |
| Document Number: | | REV: |
| Date: 15/07/2022 12:03:29 | Sheet: 8 | |