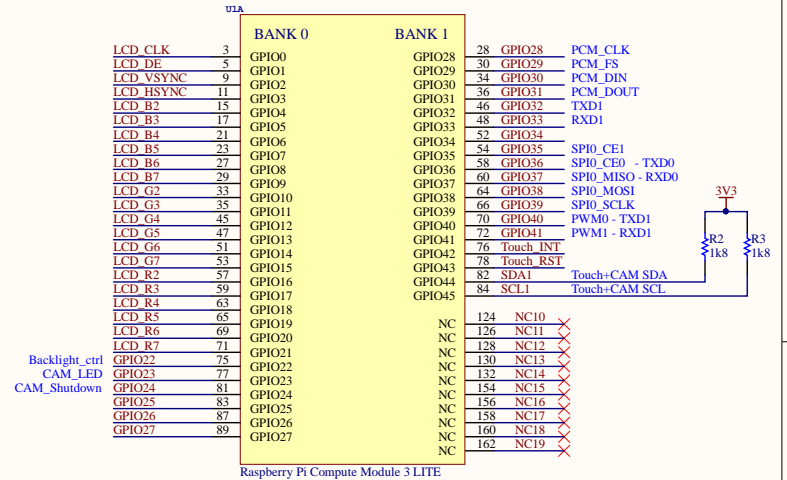




|        | Pull | ALT0       | ALT1          | ALT2       | ALT3             | ALT4       | ALT5     |
|--------|------|------------|---------------|------------|------------------|------------|----------|
| GPIO0  | High | SDA0       | SA5           | <reserved> |                  |            |          |
| GPIO1  | High | SCL0       | SA4           | <reserved> |                  |            |          |
| GPIO2  | High | SDA1       | SA3           | <reserved> |                  |            |          |
| GPIO3  | High | SCL1       | SA2           | <reserved> |                  |            |          |
| GPIO4  | High | GPCLK0     | SA1           | <reserved> |                  |            | ARM_TDI  |
| GPIO5  | High | GPCLK1     | SA0           | <reserved> |                  |            | ARM_TDO  |
| GPIO6  | High | GPCLK2     | SOE_N / SE    | <reserved> |                  |            | ARM_RTCK |
| GPIO7  | High | SPI0_CE1_N | SWE_N / SRW_N | <reserved> |                  |            |          |
| GPIO8  | High | SPI0_CE0_N | SD0           | <reserved> |                  |            |          |
| GPIO9  | Low  | SPI0_MISO  | SD1           | <reserved> |                  |            |          |
| GPIO10 | Low  | SPI0_MOSI  | SD2           | <reserved> |                  |            |          |
| GPIO11 | Low  | SPI0_SCLK  | SD3           | <reserved> |                  |            |          |
| GPIO12 | Low  | PWM0       | SD4           | <reserved> |                  |            | ARM_TMS  |
| GPIO13 | Low  | PWM1       | SD5           | <reserved> |                  |            | ARM_TCK  |
| GPIO14 | Low  | TXD0       | SD6           | <reserved> |                  |            | TXD1     |
| GPIO15 | Low  | RXD0       | SD7           | <reserved> |                  |            | RXD1     |
| GPIO16 | Low  | <reserved> | SD8           | <reserved> | CTS0             | SPI1_CE2_N | CTS1     |
| GPIO17 | Low  | <reserved> | SD9           | <reserved> | RTS0             | SPI1_CE1_N | RTS1     |
| GPIO18 | Low  | PCM_CLK    | SD10          | <reserved> | BSCSL_SDA / MISO | SPI1_CE0_N | PWM0     |
| GPIO19 | Low  | PCM_FS     | SD11          | <reserved> | BSCSL_SCL / SCLK | SPI1_MISO  | PWM1     |
| GPIO20 | Low  | PCM_DIN    | SD12          | <reserved> | BSCSL / MISO     | SPI1_MOSI  | GPCLK0   |
| GPIO21 | Low  | PCM_DOUT   | SD13          | <reserved> | BSCSL / CE_N     | SPI1_SCLK  | GPCLK1   |
| GPIO22 | Low  | <reserved> | SD14          | <reserved> | SD1_CLK          | ARM_TRST   |          |
| GPIO23 | Low  | <reserved> | SD15          | <reserved> | SD1_CMD          | ARM_RTCK   |          |
| GPIO24 | Low  | <reserved> | SD16          | <reserved> | SD1_DAT0         | ARM_TDO    |          |
| GPIO25 | Low  | <reserved> | SD17          | <reserved> | SD1_DAT1         | ARM_TCK    |          |
| GPIO26 | Low  | <reserved> | <reserved>    | <reserved> | SD1_DAT2         | ARM_TDI    |          |
| GPIO27 | Low  | <reserved> | <reserved>    | <reserved> | SD1_DAT3         | ARM_TMS    |          |
| GPIO28 | -    | SDA0       | SA5           | PCM_CLK    | <reserved>       |            |          |
| GPIO29 | -    | SCL0       | SA4           | PCM_FS     | <reserved>       |            |          |
| GPIO30 | Low  | <reserved> | SA3           | PCM_DIN    | CTS0             |            | CTS1     |
| GPIO31 | Low  | <reserved> | SA2           | PCM_DOUT   | RTS0             |            | RTS1     |
| GPIO32 | Low  | GPCLK0     | SA1           | <reserved> | TXD0             |            | TXD1     |
| GPIO33 | Low  | <reserved> | SA0           | <reserved> | RXD0             |            | RXD1     |
| GPIO34 | High | GPCLK0     | SOE_N / SE    | <reserved> | <reserved>       |            |          |
| GPIO35 | High | SPI0_CE1_N | SWE_N / SRW_N | <reserved> | <reserved>       |            |          |
| GPIO36 | High | SPI0_CE0_N | SD0           | <reserved> | <reserved>       |            |          |
| GPIO37 | Low  | SPI0_MISO  | SD1           | <reserved> | <reserved>       |            |          |
| GPIO38 | Low  | SPI0_MOSI  | SD2           | <reserved> | <reserved>       |            |          |
| GPIO39 | Low  | SPI0_SCLK  | SD3           | <reserved> | <reserved>       |            |          |
| GPIO40 | Low  | PWM0       | SD4           | <reserved> | <reserved>       | SPI2_MISO  | TXD1     |
| GPIO41 | Low  | PWM1       | SD5           | <reserved> | <reserved>       | SPI2_MOSI  | RXD1     |
| GPIO42 | Low  | GPCLK1     | SD6           | <reserved> | <reserved>       | SPI2_SCLK  | RTS1     |
| GPIO43 | Low  | GPCLK2     | SD7           | <reserved> | <reserved>       | SPI2_CE0_N | CTS1     |
| GPIO44 | -    | GPCLK1     | SDA0          | SDA1       | <reserved>       | SPI2_CE1_N |          |
| GPIO45 | -    | PWM1       | SCL0          | SCL1       | <reserved>       | SPI2_CE2_N |          |
| GPIO46 | High | <Internal> |               |            |                  |            |          |
| GPIO47 | High | <Internal> |               |            |                  |            |          |
| GPIO48 | High | <Internal> |               |            |                  |            |          |
| GPIO49 | High | <Internal> |               |            |                  |            |          |
| GPIO50 | High | <Internal> |               |            |                  |            |          |
| GPIO51 | High | <Internal> |               |            |                  |            |          |
| GPIO52 | High | <Internal> |               |            |                  |            |          |
| GPIO53 | High | <Internal> |               |            |                  |            |          |



| Name             | Function                            | See section                |
|------------------|-------------------------------------|----------------------------|
| SDA0             | BSC <sup>®</sup> master 0 data line | BSC                        |
| SCL0             | BSC master 0 clock line             | BSC                        |
| SDA1             | BSC master 1 data line              | BSC                        |
| SCL1             | BSC master 1 clock line             | BSC                        |
| GPCLK0           | General purpose Clock 0             | <TBD>                      |
| GPCLK1           | General purpose Clock 1             | <TBD>                      |
| GPCLK2           | General purpose Clock 2             | <TBD>                      |
| SPI0_CE1_N       | SPI0 Chip select 1                  | SPI                        |
| SPI0_CE0_N       | SPI0 Chip select 0                  | SPI                        |
| SPI0_MISO        | SPI0 MISO                           | SPI                        |
| SPI0_MOSI        | SPI0 MOSI                           | SPI                        |
| SPI0_SCLK        | SPI0 Serial clock                   | SPI                        |
| PWMx             | Pulse Width Modulator 0..1          | Pulse Width Modulator      |
| TXD0             | UART 0 Transmit Data                | UART                       |
| RXD0             | UART 0 Receive Data                 | UART                       |
| CTS0             | UART 0 Clear To Send                | UART                       |
| RTS0             | UART 0 Request To Send              | UART                       |
| PCM_CLK          | PCM clock                           | PCM Audio                  |
| PCM_FS           | PCM Frame Sync                      | PCM Audio                  |
| PCM_DIN          | PCM Data in                         | PCM Audio                  |
| PCM_DOUT         | PCM data out                        | PCM Audio                  |
| Sax              | Secondary mem Address bus           | Secondary Memory Interface |
| SOE_N / SE       | Secondary mem. Controls             | Secondary Memory Interface |
| SWE_N / SRW_N    | Secondary mem. Controls             | Secondary Memory Interface |
| SDx              | Secondary mem. data bus             | Secondary Memory Interface |
| BSCSL_SDA / MOSI | BSC slave Data, SPI slave MOSI      | BSC ISP slave              |
| BSCSL_SCL / SCLK | BSC slave Clock, SPI slave clock    | BSC ISP slave              |
| BSCSL - / MISO   | BSC <not used>, SPI MISO            | BSC ISP slave              |
| BSCSL - / CE_N   | BSC <not used>, SPI Csn             | BSC ISP slave              |
| SPI1_CEx_N       | SPI1 Chip select 0-2                | Auxiliary I/O              |
| SPI1_MISO        | SPI1 MISO                           | Auxiliary I/O              |
| SPI1_MOSI        | SPI1 MOSI                           | Auxiliary I/O              |
| SPI1_SCLK        | SPI1 Serial clock                   | Auxiliary I/O              |
| TXD0             | UART 1 Transmit Data                | Auxiliary I/O              |
| RXD0             | UART 1 Receive Data                 | Auxiliary I/O              |
| CTS0             | UART 1 Clear To Send                | Auxiliary I/O              |
| RTS0             | UART 1 Request To Send              | Auxiliary I/O              |
| SPI2_CEx_N       | SPI2 Chip select 0-2                | Auxiliary I/O              |
| SPI2_MISO        | SPI2 MISO                           | Auxiliary I/O              |
| SPI2_MOSI        | SPI2 MOSI                           | Auxiliary I/O              |
| SPI2_SCLK        | SPI2 Serial clock                   | Auxiliary I/O              |
| ARM_TRST         | ARM JTAG reset                      | <TBD>                      |
| ARM_RTCK         | ARM JTAG return clock               | <TBD>                      |
| ARM_TDO          | ARM JTAG Data out                   | <TBD>                      |
| ARM_TCK          | ARM JTAG Clock                      | <TBD>                      |
| ARM_TDI          | ARM JTAG Data in                    | <TBD>                      |
| ARM_TMS          | ARM JTAG Mode select                | <TBD>                      |

Title **CM3-PANEL\_IO**  
 Size: A3 Number: 2 Revision: 1.0  
 Date: 25/04/2018 Time: 13:34:28 Sheet: 2 of 6  
 File: CM3-Panel\_IO.SchDoc Author: Guido Ottaviani

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