

ARM9-Module Datasheet

V-0.1

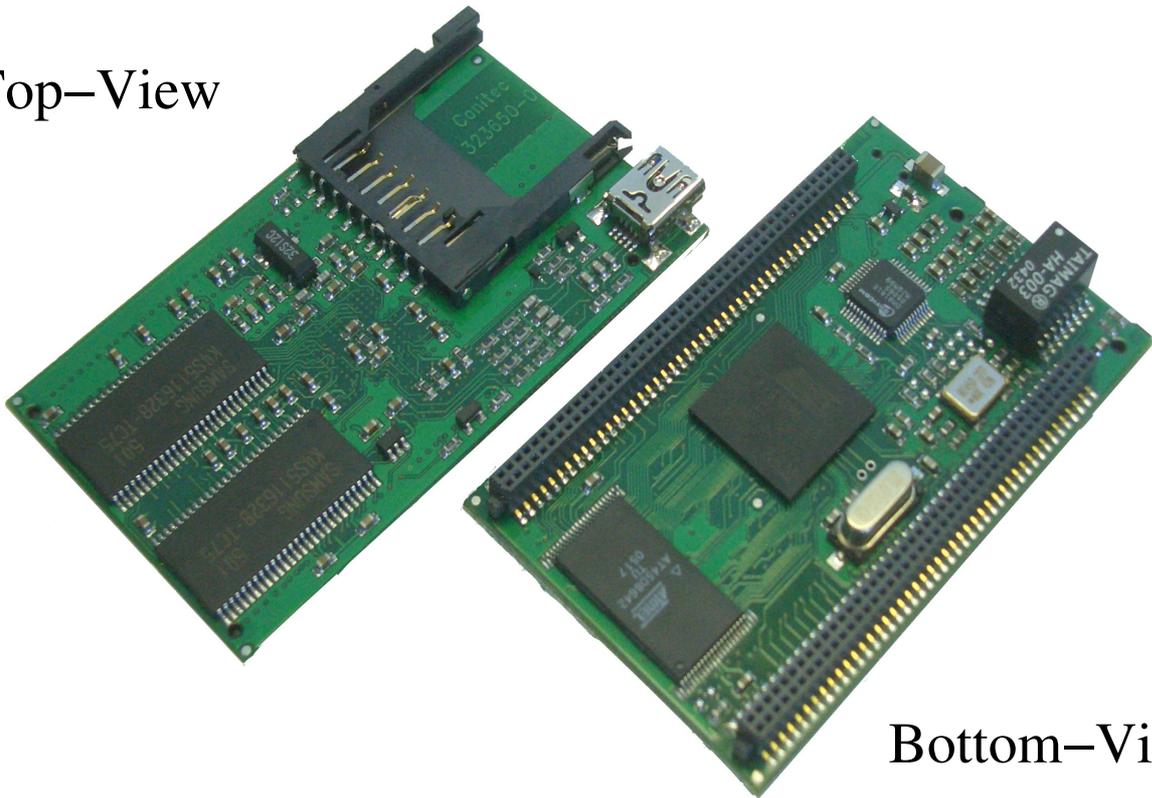
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1 Overview

1.1 The MCU-Module

Top-View



Bottom-View

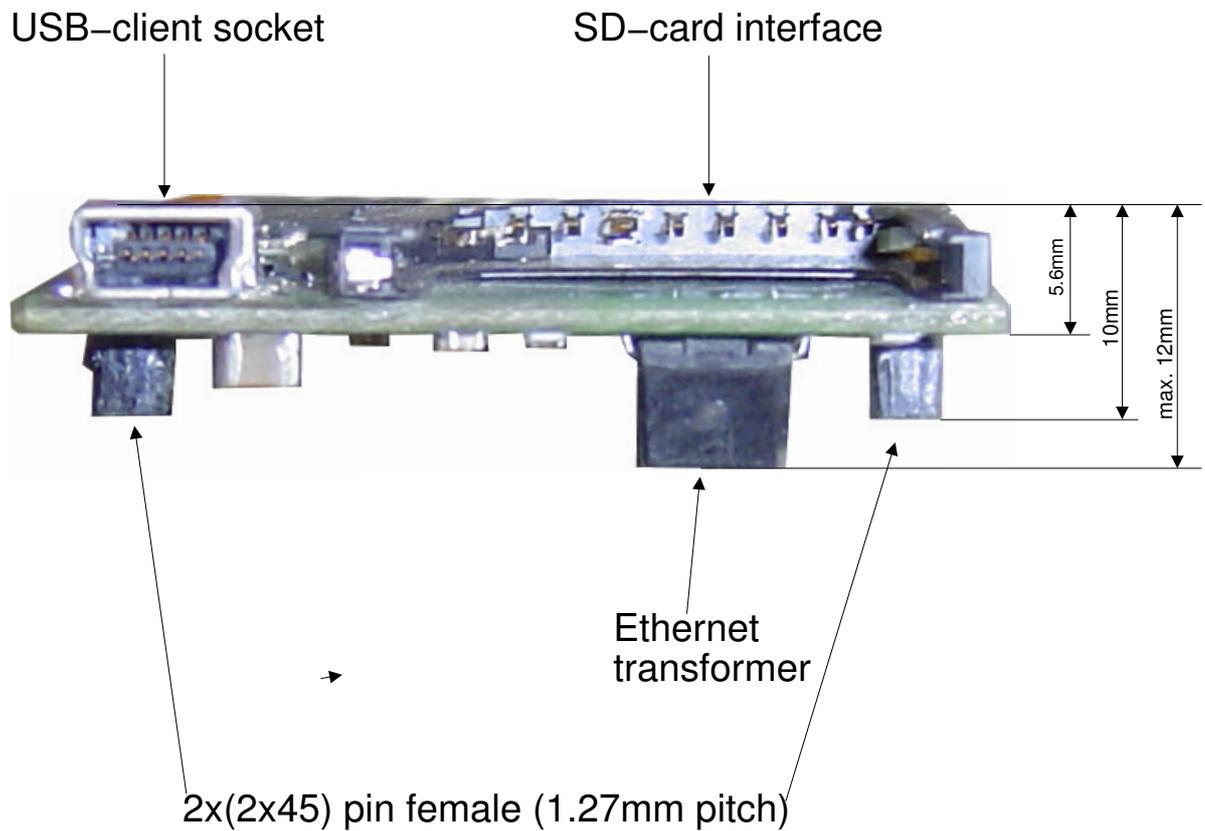
Dimensions:

- Width: 43mm
- Length: 70mm
- Height: 12mm¹
- Weight: 21g

¹If mounted the height will be increased by 0.3mm due to the male-socket on pc-board.

1.2 Front view

This shows the front of the mcu-module.

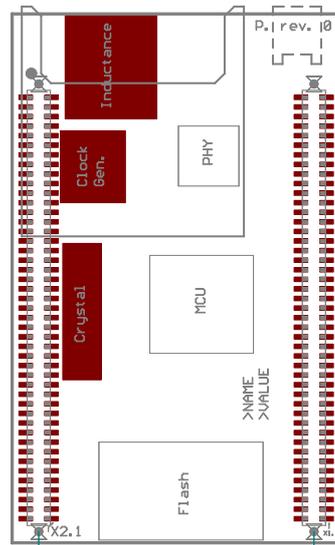


Possible connectors

- TFC-145-02-L-D-A (samtec)
- STL21-55CVGT-090P (mpe garry)

1.3 Socket pin assignment overview

ETH-R	ETH-T+
ETH-R-	ETH-T-
GND7	PHY_OP2
PHY_OP0	PHY_OP1
MCI_MCDA3	MCI_MCDA2
MCI_MCKK	MCI_MCKDA
MCI_MCDA0	MCI_MCKCD
MCI_MCDA1	GPIO_PB11
GPIO_PB9	GPIO_PB12
GPIO_PB7	GPIO_PB6
GPIO_PB8	GPIO_PB1
GPIO_PB2	GPIO_PB0
GPIO_PA22	GPIO_PA20
GPIO_PA23	GPIO_PA24
GPIO_PA19	GPIO_PA17
GPIO_PA18	GPIO_PA26
GPIO_PA21	GPIO_PA25
GPIO_PA5	GPIO_PA6
GPIO_PD1	GPIO_PD4
GPIO_PD5	GPIO_PD0
GPIO_PD3	GPIO_PD2
GPIO_PC15	GPIO_PC5
GND6	GPIO_PC3
GPIO_PC0	GPIO_PC2
GPIO_PC1	SPI_CS2
SPI_CS1	SPI_CS3
SPI_CS0_DF*	SPI_SCK
SPI_MOSI	SPI_MISO
NCS6	NCS5
NCS7	NCS4
DATA31	DATA16
DATA30	DATA17
DATA29	DATA18
DATA28	DATA19
DATA27	DATA20
DATA26	DATA21
DATA25	DATA22
DATA24	DATA23
ADDR12	ADDR1
ADDR11	ADDR0
ADDR8	ADDR10
ADDR7	ADDR9
ADDR4	ADDR2
ADDR6	ADDR3
GND5	ADDR5



+3.3V_2	+3.3V_1
GND4	GND3
+1.8V OUT	USB_CLIENT_5V
USB_CLIENT_C+	USB_CLIENT_C-
USB_HOST_MA	USB_HOST_MB
USB_HOST_PA	USB_HOST_PB
JTAG_SEL	JTAG_TCK
JTAG_TDO	JTAG_TDI
JTAG_TMS	JTAG_NTRST
GPIO_PB13	GPIO_PB17
GPIO_PB21	GPIO_PB28_FIQ
GPIO_PB20	GPIO_PB29
GPIO_PB18	GPIO_PB27
GPIO_PB23	GPIO_PB26
GPIO_PB14	GPIO_PB25
GPIO_PB19	GPIO_PB24
GPIO_PB22	GPIO_PB16
GPIO_PD8	GPIO_PB15
GPIO_PD10	GPIO_PD13
GPIO_PD14	GPIO_PD15
GPIO_PD16	GPIO_PD7
GPIO_PD18	GPIO_PD17
GPIO_PD27	GPIO_PD23
GPIO_PD22	GPIO_PD25
GPIO_PD21	GPIO_PD24
DBGU_RXD	GPIO_PD26
DBGU_TXD	GND2
NCS2	NRESET
NWE	NRD
NCS3	NCS0
DATA0	DATA15
DATA1	DATA14
DATA2	DATA13
DATA3	DATA12
DATA4	DATA11
DATA5	DATA10
DATA6	DATA9
DATA7	DATA8
ADDR18	ADDR19
ADDR15	ADDR23
ADDR14	ADDR24*
ADDR13	ADDR20
ADDR17	ADDR25*
ADDR16	ADDR22
GND1	ADDR21

2 Schematics

2.1 MCU-Module

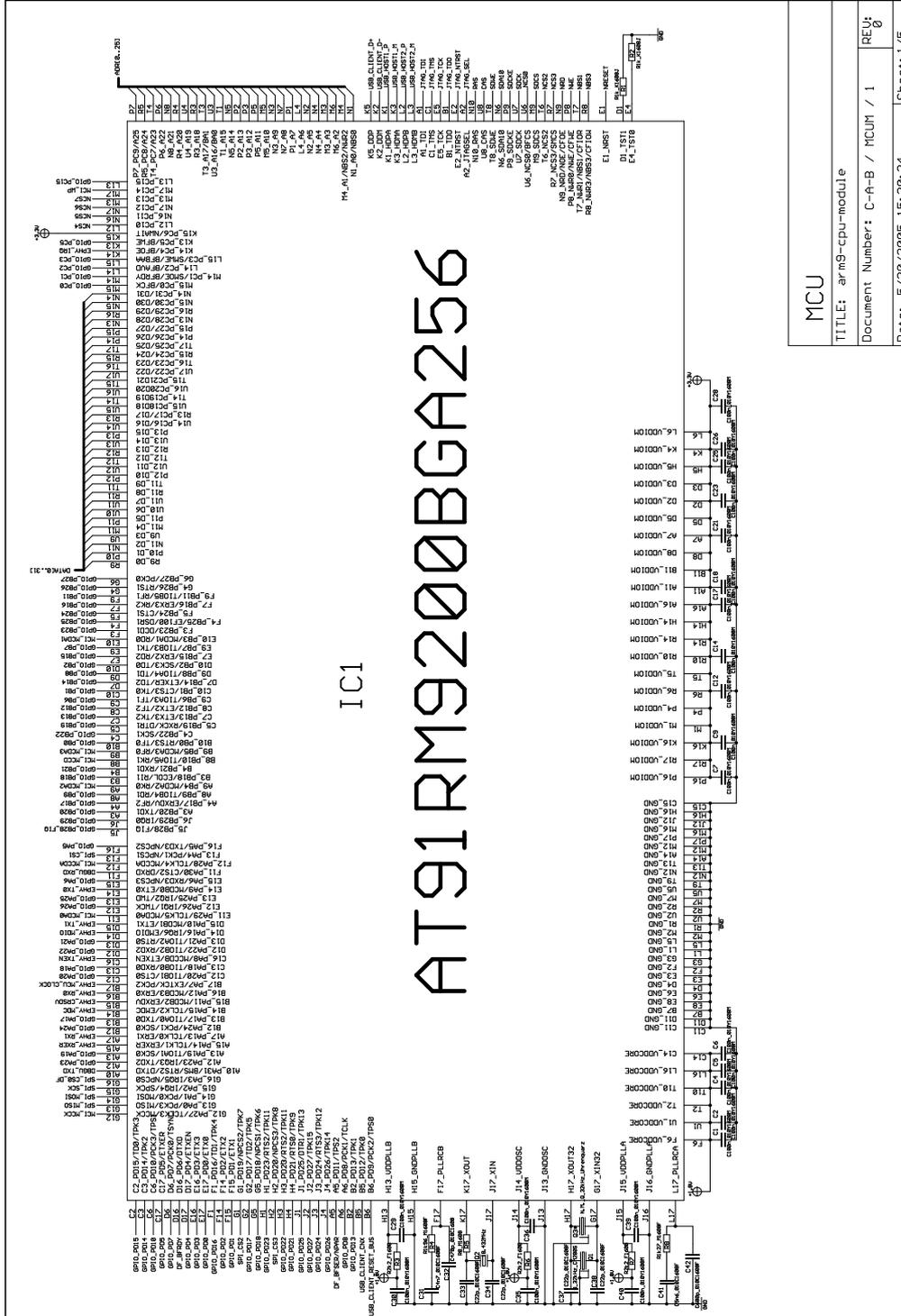
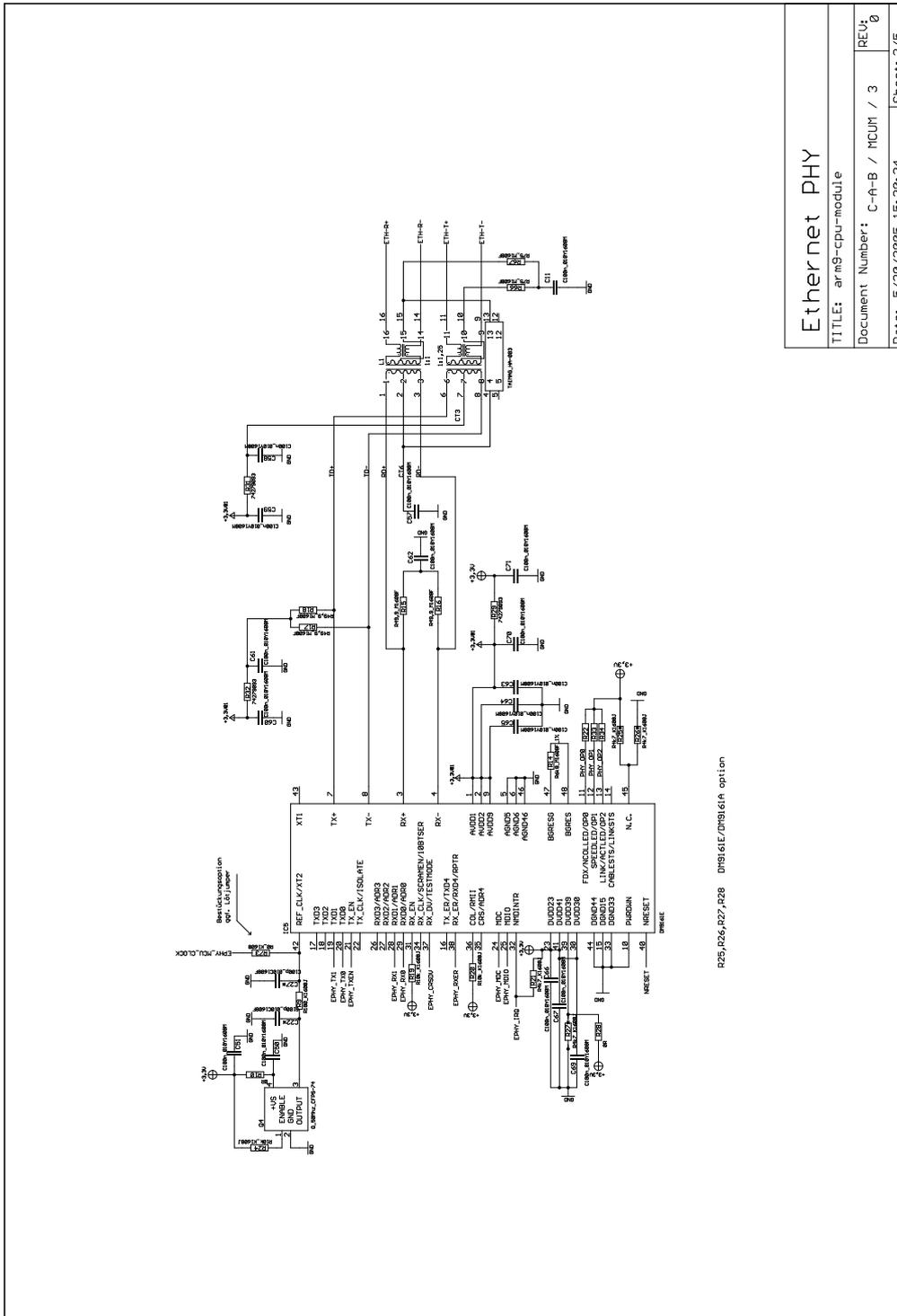


Figure 1: MCU

2.3 Ethernet



Ethernet PHY	
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Figure 3: Ethernet

2.4 SD-Card

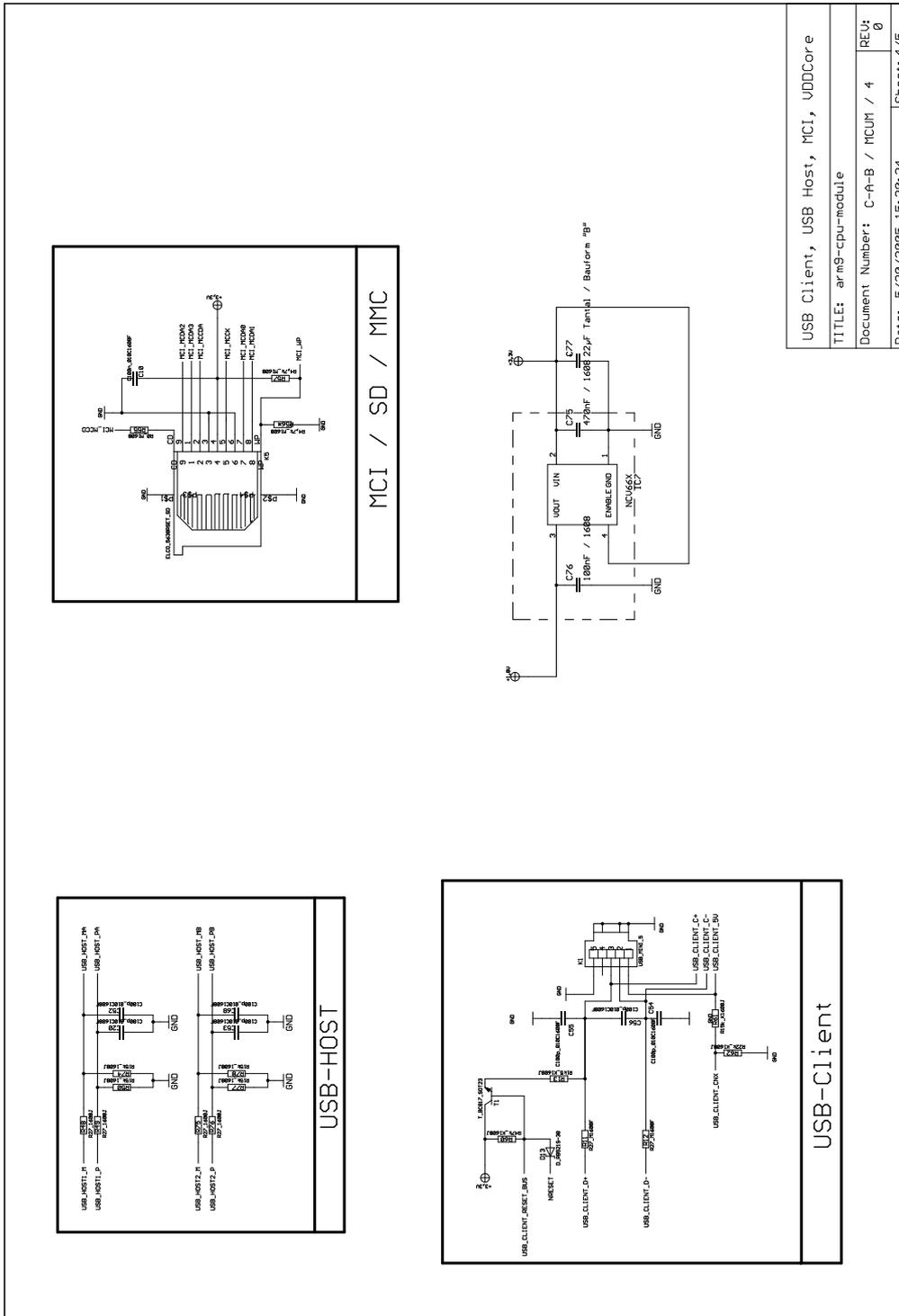
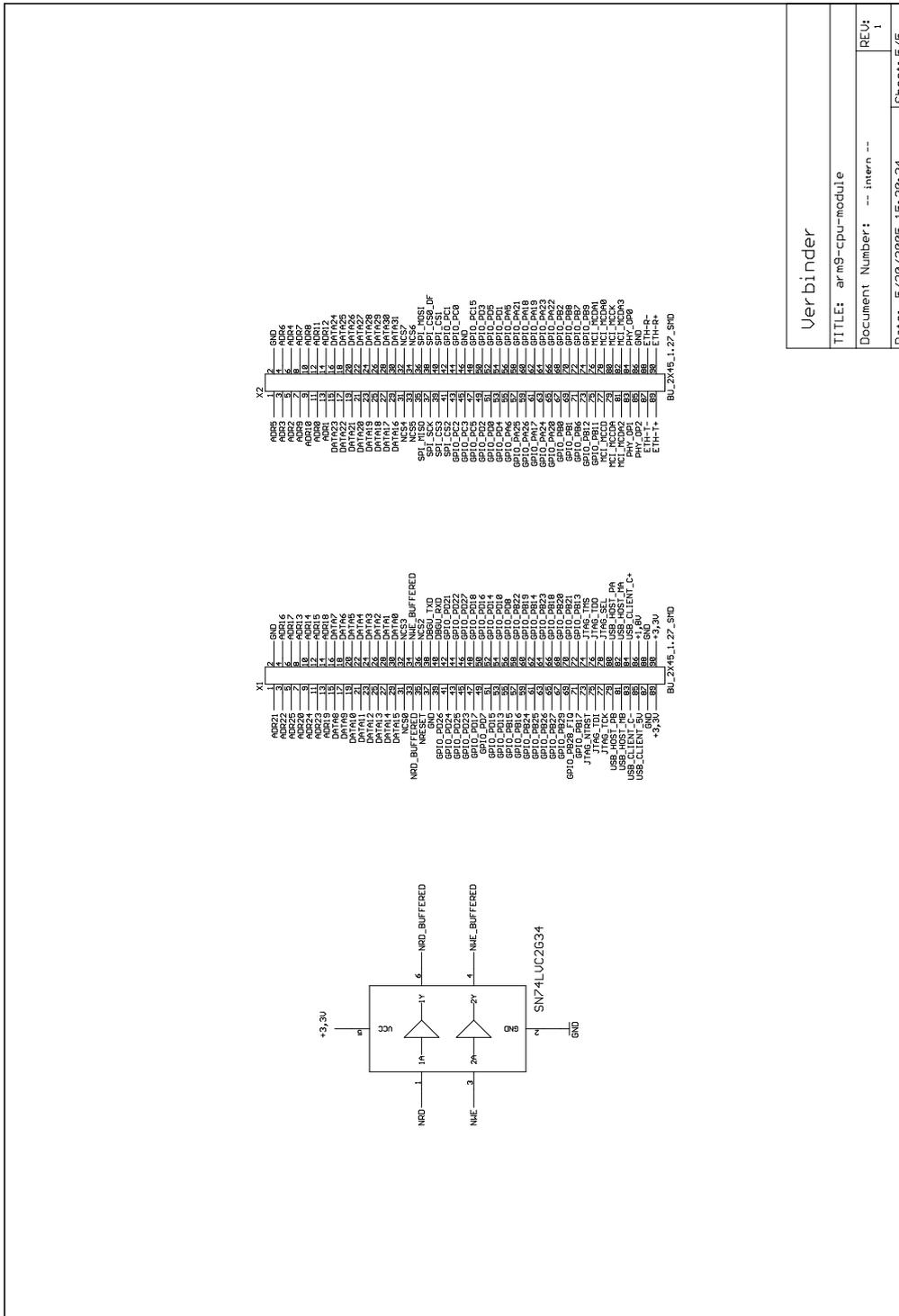


Figure 4: SD-Card Interface and USB Host / Client

2.5 Connectors



3 Datasheet history

V0.1

Initial preliminary release.

V0.1a

Only document formating changes.

V0.1b

- ▶ Better „Socket pin assignment view”.
- ▶ Recommendation of connector types.