

FRAMOS FSA interface

To Wire to Board connector

J1
DF40C-60DS-0.4V(51)

To Wire to Board connector

3V8_CAM
3V8_CAM
1V8_CAM
CAM_SCL_1V8
CSI_CAM_XVS
CAM_SDA_1V8
CSI_CAM_XTRIG
1V8_CAM
CSI_CAM_EN
GND
CSI_CAM_CLK
GND
CSI_D0_N
CSI_D0_P
CSI_D2_P
CSI_D2_N

AUX_ANA
2V9
AUX_IF
1V8
100k R1 XCLR
TP3 XMASTER
TP5 XCE
TP7 XHS
PW_EN_0
TP10 SLAMODE1
R5
10k R6
12k R8
TP9
R13
DNP
OR
R9 INCK
DNP
R10 MCLK1
DNP
OR

AUX_DIG
1V2
AUX_V
2V9
SD0
TP12
TENABLE
TP13
TOUT
TP8
PW_EN_1
SLAMODE2
TP14
R3 100k
R4
DNP
10k
R7
DNP
12k
GND

1V8_CAM
1V8_CAM
1V8_CAM
CSI_CAM_EN
CSI_D3_P
CSI_D3_N
CSI_D1_N
CSI_D1_P
CSI_CLK_P
CSI_CLK_N

3V8_CAM
1V8_CAM
GND
GND

C8 100n
C12 100n
GND
GND

FRAMOS CSI interposer connector

J2

CSI_D3_N
CSI_D3_P
CSI_D2_N
CSI_D2_P
CSI_D1_N
CSI_D1_P
CSI_D0_N
CSI_D0_P
CSI_CLK_N
CSI_CLK_P
CAM_SDA_3V3
CAM_SCL_3V3
CSI_CAM_EN
CSI_CAM_XVS
CSI_CAM_CLK
CSI_CAM_XTRIG
3V3FFC
PWR_FLAG
TP20
5V0_SYS
PWR_FLAG
TP21
GND

5V0_SYS
C15 100n
GND
3V3FFC
C16 100n
GND

STMicroelectronics
MSAK24025P30
Matching socket: STE-I-PEX-20455-030E-12
Matching cable: KAB-I-PEX-20453-030T-0500-1:1-ROUND

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CAM_SDA_1V8
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1V8_CAM
CSI_CAM_EN
GND
CSI_CAM_CLK
GND
CSI_D0_N
CSI_D0_P
CSI_D2_P
CSI_D2_N

AUX_ANA
2V9
AUX_IF
1V8
100k R1 XCLR
TP3 XMASTER
TP5 XCE
TP7 XHS
PW_EN_0
TP10 SLAMODE1
R5
10k R6
12k R8
TP9
R13
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OR
R9 INCK
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R10 MCLK1
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AUX_DIG
1V2
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2V9
SD0
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TENABLE
TP13
TOUT
TP8
PW_EN_1
SLAMODE2
TP14
R3 100k
R4
DNP
10k
R7
DNP
12k
GND

1V8_CAM
1V8_CAM
1V8_CAM
CSI_CAM_EN
CSI_D3_P
CSI_D3_N
CSI_D1_N
CSI_D1_P
CSI_CLK_P
CSI_CLK_N

3V8_CAM
1V8_CAM
GND
GND

C8 100n
C12 100n
GND
GND

FRAMOS CSI interposer connector

J2

CSI_D3_N
CSI_D3_P
CSI_D2_N
CSI_D2_P
CSI_D1_N
CSI_D1_P
CSI_D0_N
CSI_D0_P
CSI_CLK_N
CSI_CLK_P
CAM_SDA_3V3
CAM_SCL_3V3
CSI_CAM_EN
CSI_CAM_XVS
CSI_CAM_CLK
CSI_CAM_XTRIG
3V3FFC
PWR_FLAG
TP20
5V0_SYS
PWR_FLAG
TP21
GND

5V0_SYS
C15 100n
GND
3V3FFC
C16 100n
GND

STMicroelectronics
MSAK24025P30
Matching socket: STE-I-PEX-20455-030E-12
Matching cable: KAB-I-PEX-20453-030T-0500-1:1-ROUND

I2C logic level translator

JNB can have I2C configured as 1V8

Pull-up resistors from 3V3 side are placed on JNB

I2C logic level translator bypass

CAM_SCL_1V8 OR DNP R16 CAM_SCL_3V3

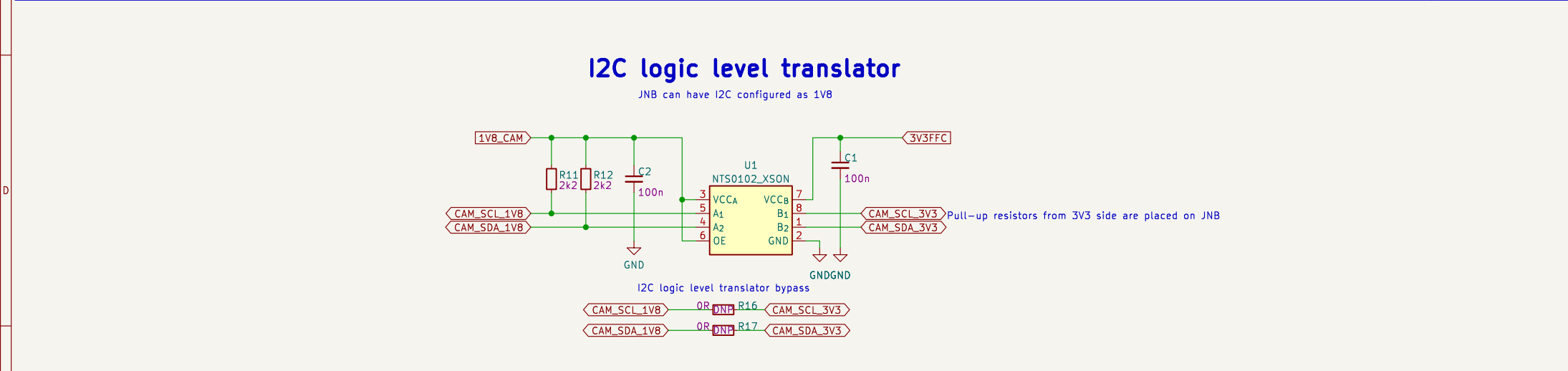
CAM_SDA_1V8 OR DNP R17 CAM_SDA_3V3

I2C logic level translator

JNB can have I2C configured as 1V8

I2C logic level translator bypass

Pull-up resistors from 3V3 side are placed on JNB



Mount holes

	MP1 MP_Pad4.5mm_Drill2.2mm
	MP2 MP_Pad4.5mm_Drill2.2mm
	MP3 MP_Pad4.5mm_Drill2.2mm
	MP4 MP_Pad4.5mm_Drill2.2mm

- # Mount holes
- | | |
|---|-------------------------------|
|  | MP1
MP_Pad4.5mm_Drill2.2mm |
|  | MP2
MP_Pad4.5mm_Drill2.2mm |
|  | MP3
MP_Pad4.5mm_Drill2.2mm |
|  | MP4
MP_Pad4.5mm_Drill2.2mm |

Camera LED

3V8_CAM → 330R → R2 → D1 (LFD_G_0603_KP-1608CGCK) → GND

3V8 MIPI Camera Power

5V0_SYS → U2 (AP62301Z6-7) → 3V8_CAM

U2: VIN (1), EN (5), SW (2), BST (4), GND (3), FB (6)

EN - Active H
EN float = auto startup

TP6, TP17, L1 (2u2/1.6A), C3 (22u), C4 (100n), C5 (22u), C6 (22u), R14 (37k4), R15 (10k)

1V8 MIPI Camera Power

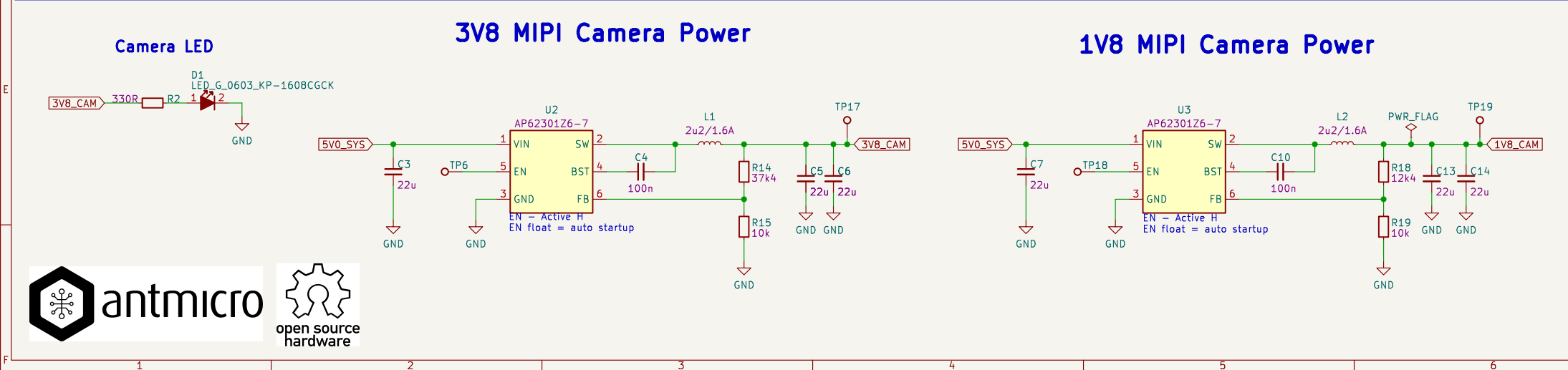
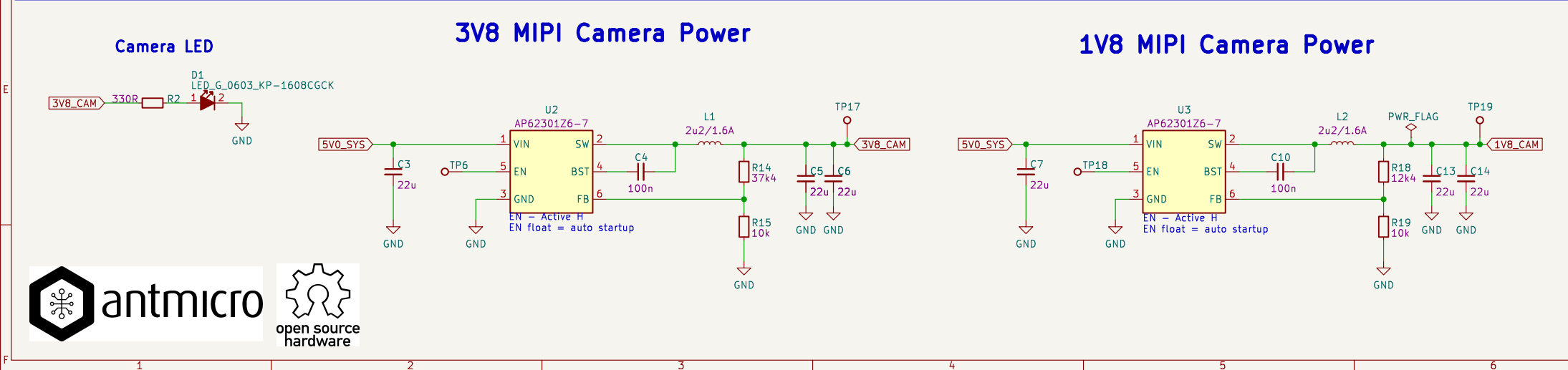
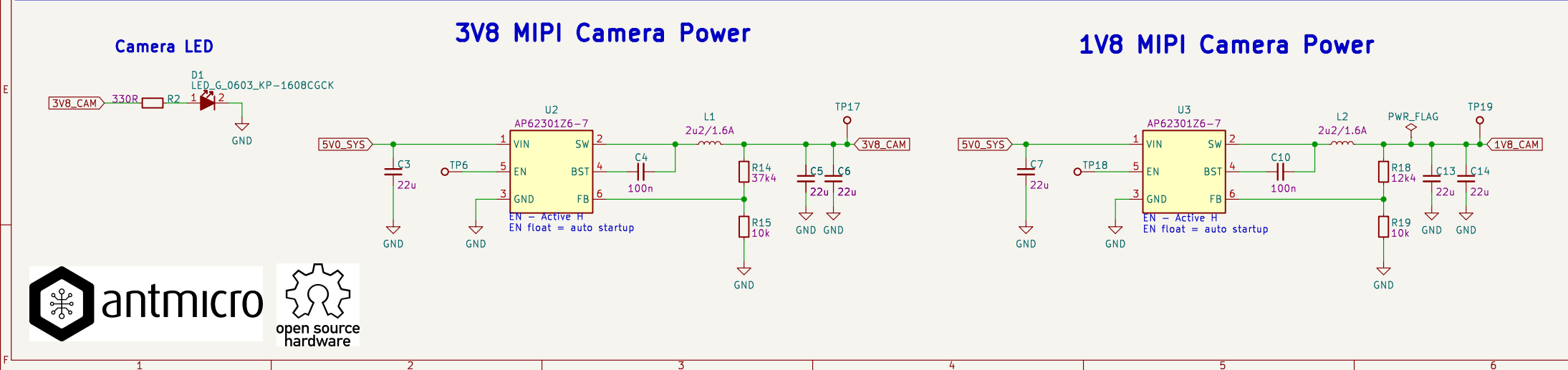
5V0_SYS → U3 (AP62301Z6-7) → 1V8_CAM

U3: VIN (1), EN (5), SW (2), BST (4), GND (3), FB (6)

EN - Active H
EN float = auto startup

TP18, TP19, L2 (2u2/1.6A), C7 (22u), C10 (100n), C13 (22u), C14 (22u), R18 (12k4), R19 (10k), PWR_FLAG

antmicro open source hardware



The diagram shows two logos arranged vertically. The first logo is labeled 'Logo N1' and contains the text 'oshw_logo'. The second logo is labeled 'Logo N2' and contains the text 'antmicro_logo'.

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Title: FRAMOS CSI adapter		
Size: A3	Date: 2023-10-16	Rev: 1.1.1:7fe54
KICad E.D.A. kicad-cli 7.0.11		Id: 1/1

Size: A3	Date: 2023-10-16	Rev: 1.1.1:7fe54
KiCad E.D.A. kicad-cli 7.0.11		Id: 1/1

Size: A3	Date: 2023-10-16	Rev: 1.1.1:7fe54
KiCad E.D.A. kicad-cli 7.0.11		Id: 1/1

Size: AS	Date: 2023-10-10	REV: 1.1.1.71234
KiCad E.D.A. kicad-cli 7.0.11		Id: 1/1

