

A

A

B

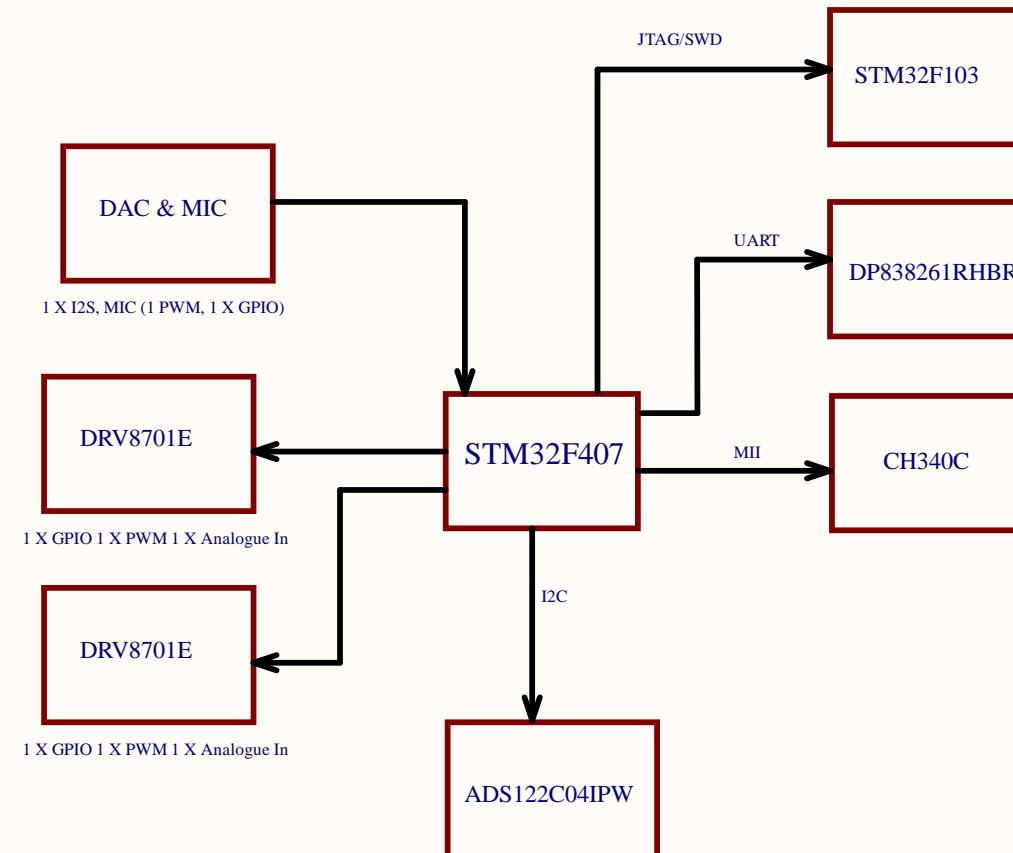
B

C

C

D

D



APPROVALS	DATE	PROJECT			
ENG: M Pourmand	2025-08-28	Mixed Signal Board			
DSN: M Pourmand	2025-08-28	PROJECT REVISION: Not in version control			
CHK: M Pourmand	2025-08-28	DOCUMENT REVISION: Not in version control			
REFERENCE DOCUMENTS					
BOM: BOM1					
ASSY DWG: ASSY01					
FAB DWG: FAB01					
PCB DWG: Mixed Signal Board Project_final	SIZE A4	DWG NO. 1234	REV *		
FILE NAME		[1] - Schematic Blocks.SchDoc	SHEET 1 OF 11		

A

A

B

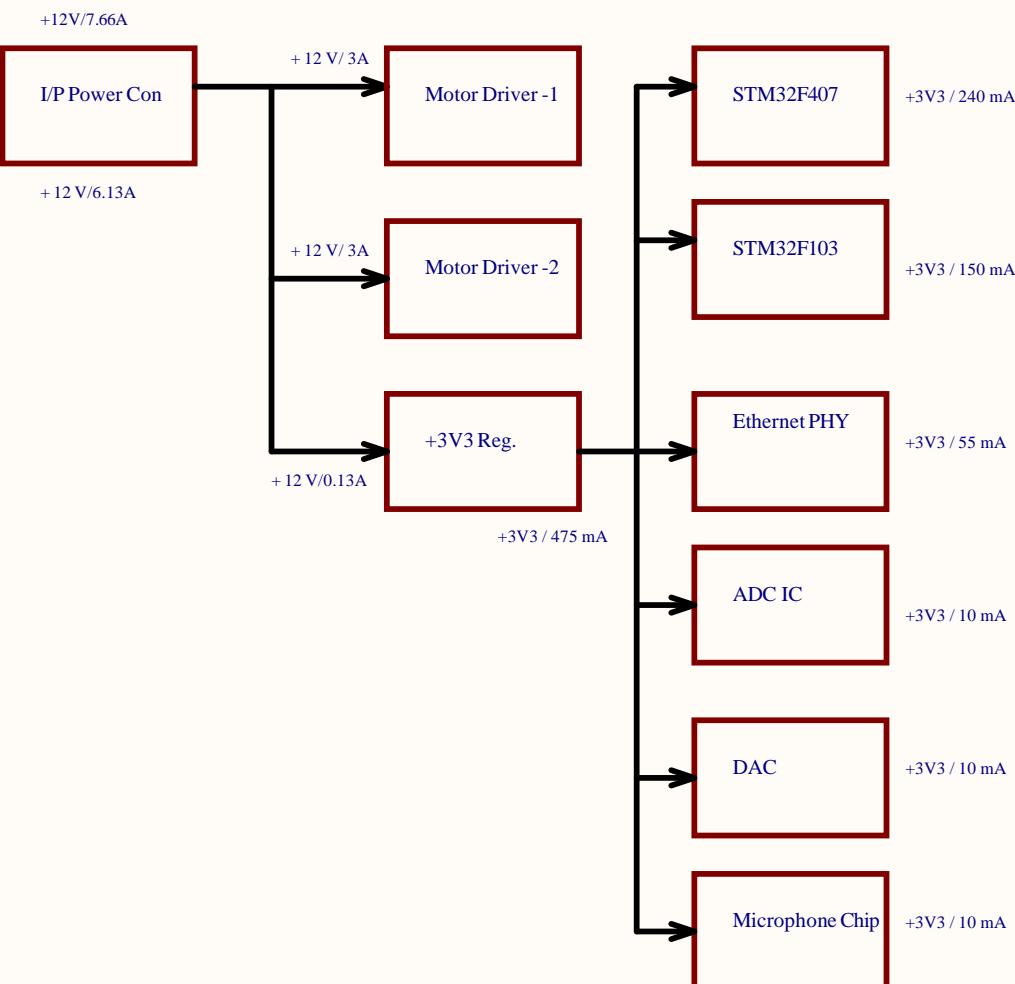
B

C

C

D

D



APPROVALS		DATE	PROJECT		Paradisgränd 03 Umedalen Umeå Sweden		
ENG:	M Pourmand	2025-08-28	Mixed Signal Board				
DSN:	M Pourmand	2025-08-28	PROJECT REVISION: Not in version control		DOCUMENT REVISION: Not in version control		
CHK:	M Pourmand	2025-08-28	DESIGN ITEM:				
TITLE							
Power budget							
REFERENCE DOCUMENTS		SIZE		DWG NO.	REV		
BOM:	BOM1	A4		1234	*		
ASSY DWG:	ASSY01						
FAB DWG:	FAB01						
PCB DWG:	Mixed Signal Board Project_final	FILE NAME	[2] - Power Budget.SchDoc	SHEET 2 OF 11			

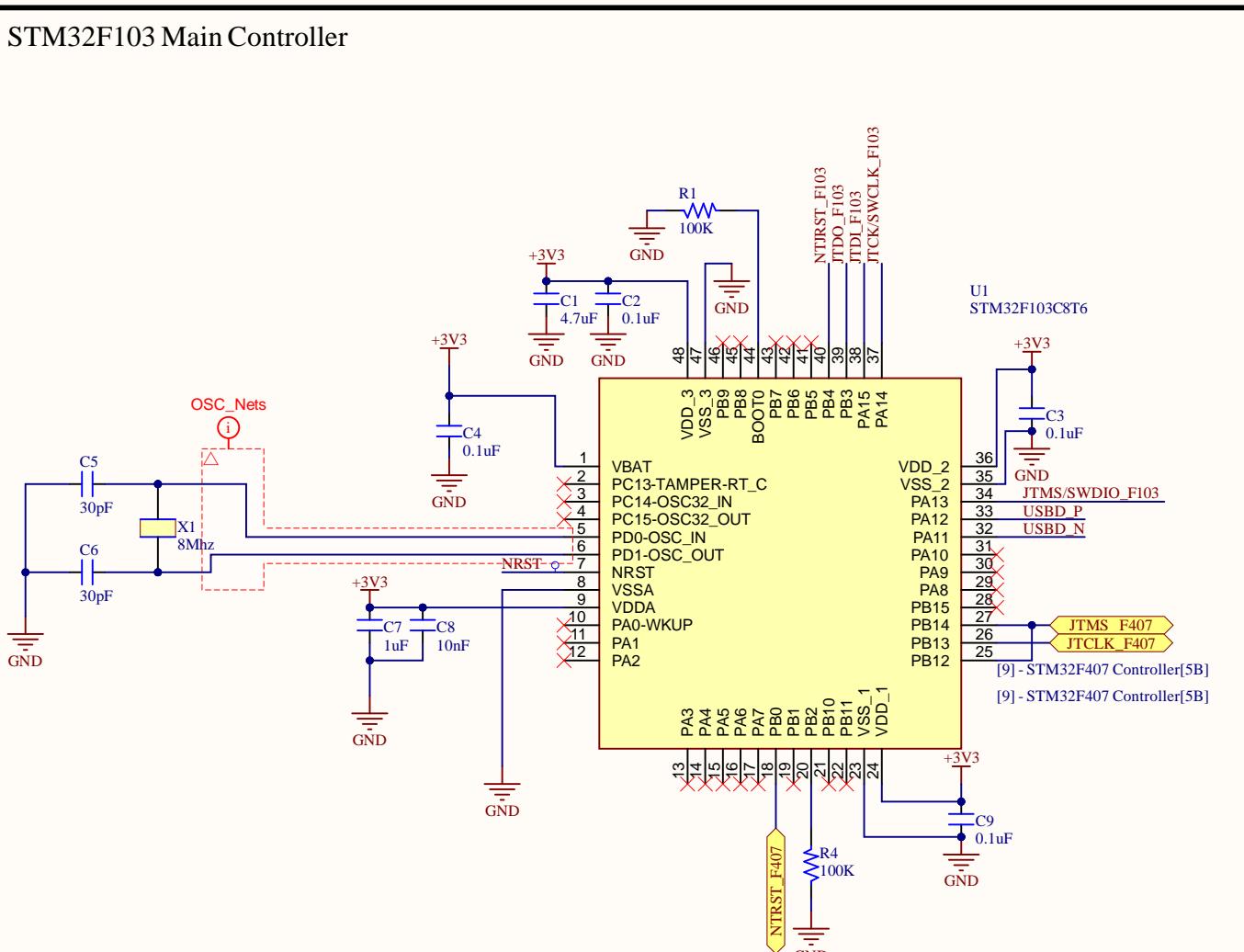
STM32F103 Main Controller

A

B

C

D



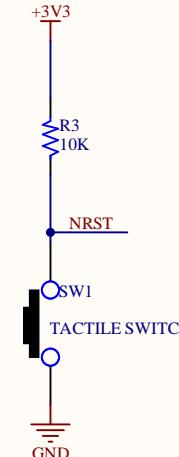
Reset STM32F103

A

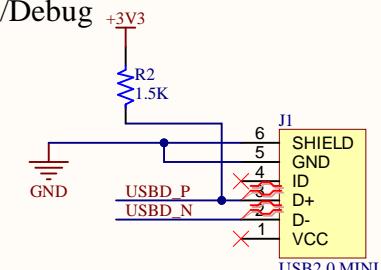
B

C

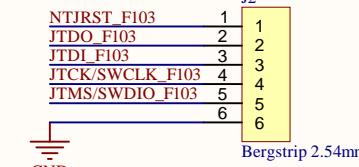
D



USB 2.0 for Program/Debug

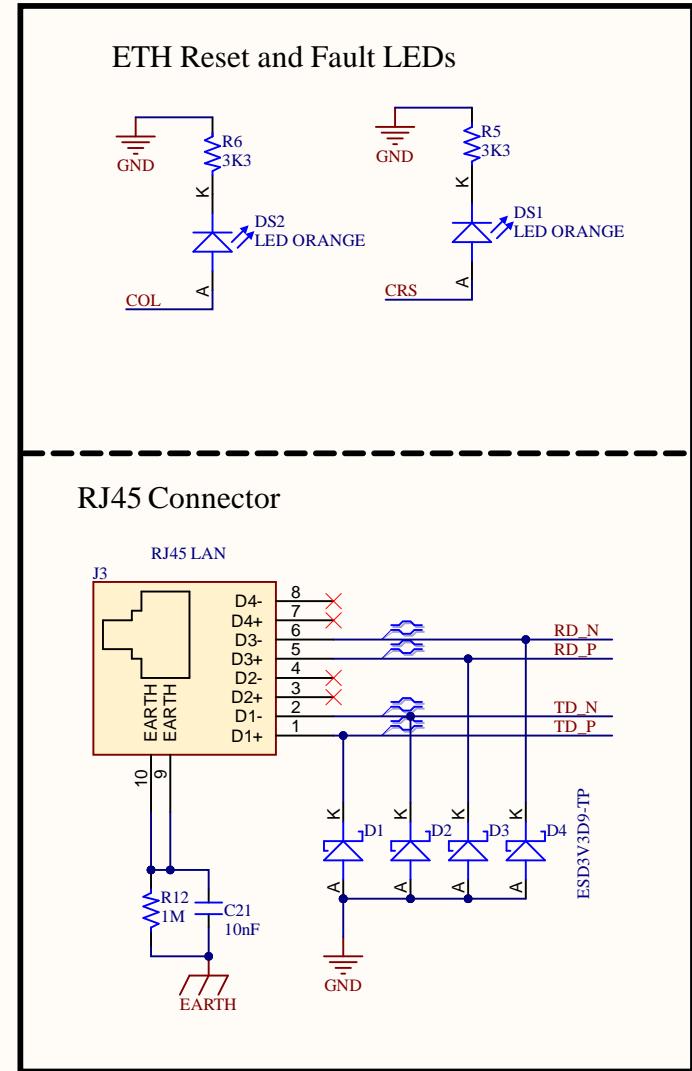
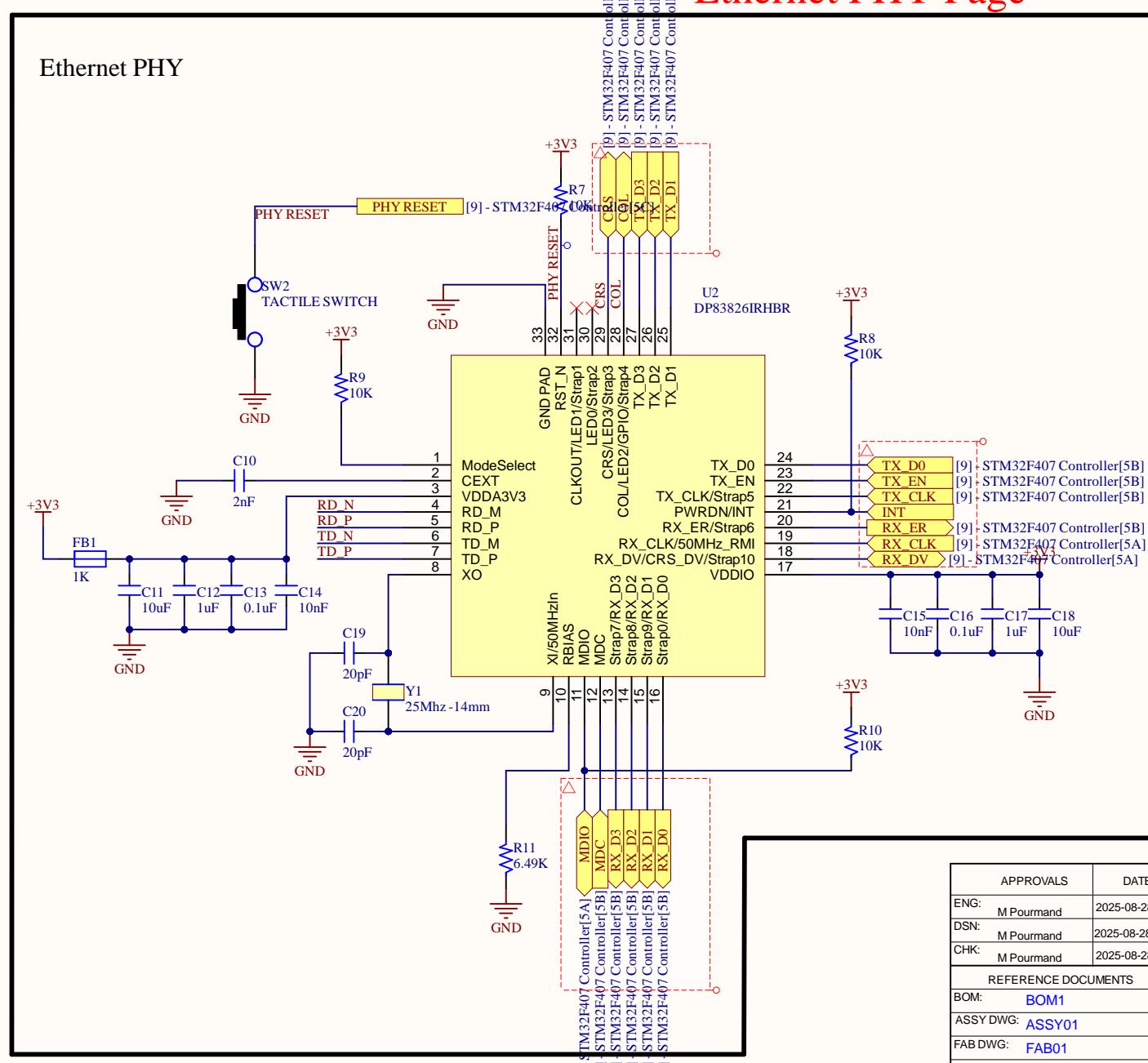


STM32F103 JTAG/SWD



APPROVALS		DATE	PROJECT			
ENG:	M Pourmand	2025-08-28	Mixed Signal Board			
DSN:	M Pourmand	2025-08-28	PROJECT REVISION: Not in version control			
CHK:	M Pourmand	2025-08-28	DOCUMENT REVISION: Not in version control			
REFERENCE DOCUMENTS						
BOM: BOM1						
ASSY DWG: ASSY01		DWG NO. 1234		REV *		
FAB DWG: FAB01		FILE NAME	[3] - STM32F103 Debugger.SchDoc	SHEET 3 OF 11		
PCB DWG: Mixed Signal Board Project_final						

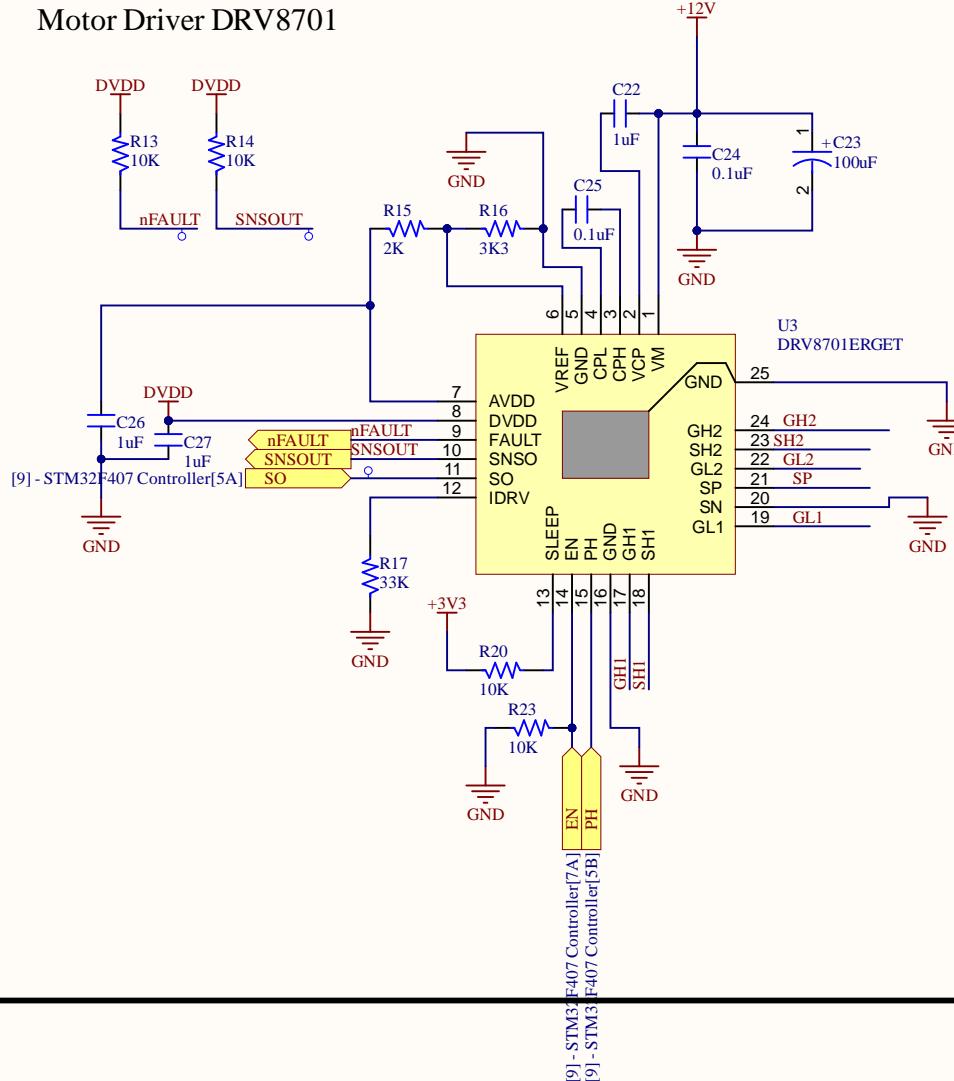
Ethernet PHY Page



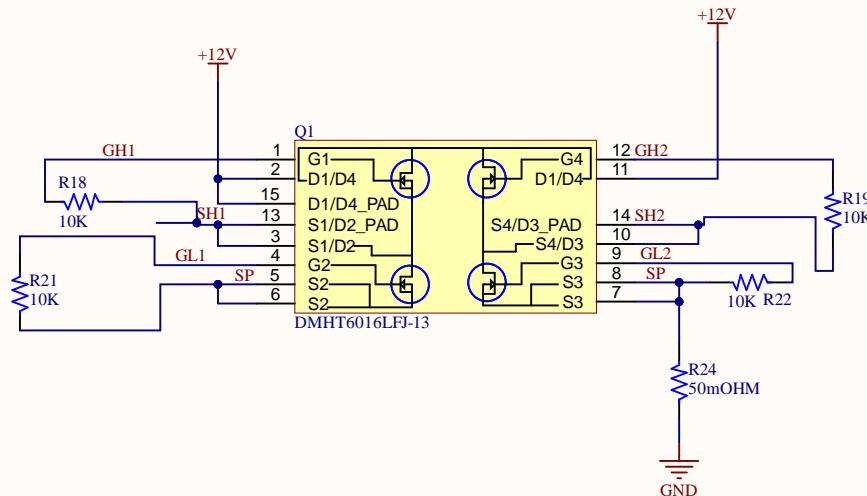
APPROVALS	DATE	PROJECT Mixed Signal Board			Paradisgränd 03 Umedalen Umeå [®] Sweden
ENG: M Poumand	2025-08-28				
DSN: M Poumand	2025-08-28	PROJECT REVISION: Not in version control	DOCUMENT REVISION: Not in version control	DESIGN ITEM:	
CHK: M Poumand	2025-08-28	TITLE			
REFERENCE DOCUMENTS					
BOM: BOM1					
ASSY DWG:	ASSY01		SIZE		REV
FAB DWG:	FAB01		A4	DWG NO. 1234	*
PCB DWG: <i>Mixed Signal Board Project_final</i>	FILE NAME [4] - Ethernet PHY.SchDoc				SHEET 4 OF 11

DRV8701 Motor Driver-1

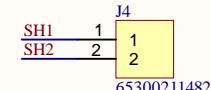
Motor Driver DRV8701



N-MOSFET



Connector for Motor - 1

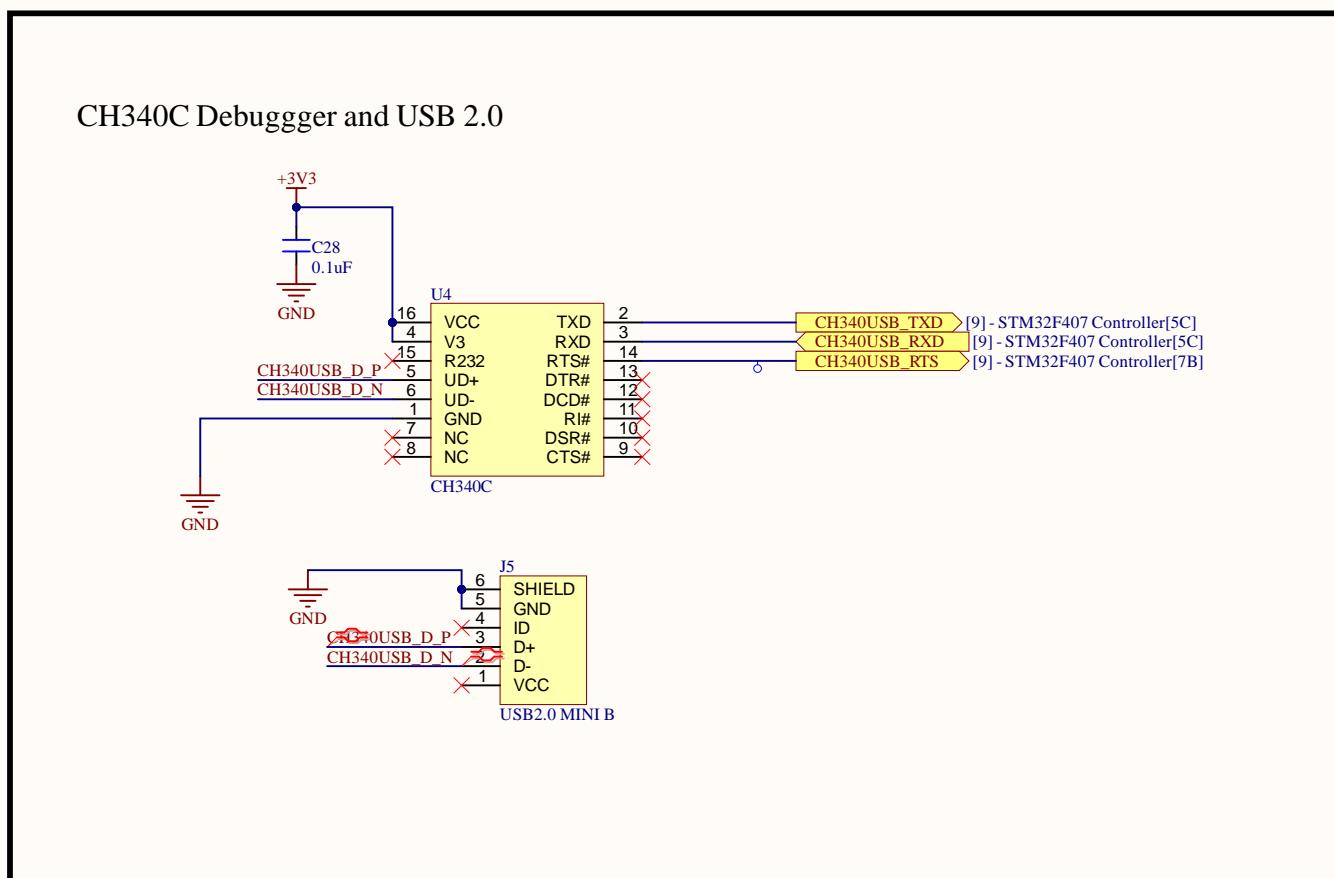


APPROVALS	DATE	PROJECT	
ENG: M Pourmand	2025-08-28	Mixed Signal Board	
DSN: M Pourmand	2025-08-28	PROJECT REVISION:	DOCUMENT REVISION:
CHK: M Pourmand	2025-08-28	Not in version control	
REFERENCE DOCUMENTS			
BOM: BOM1		DESIGN ITEM:	
ASSY DWG: ASSY01		DRV8701 Motor Driver-1	
FAB DWG: FAB01		SIZE	DWG NO.
PCB DWG: Mixed Signal Board Project_final		A4	1234
FILE NAME		[5] - Motor Driver Schematic.SchDoc	REV *
SHEET 5 OF 11			



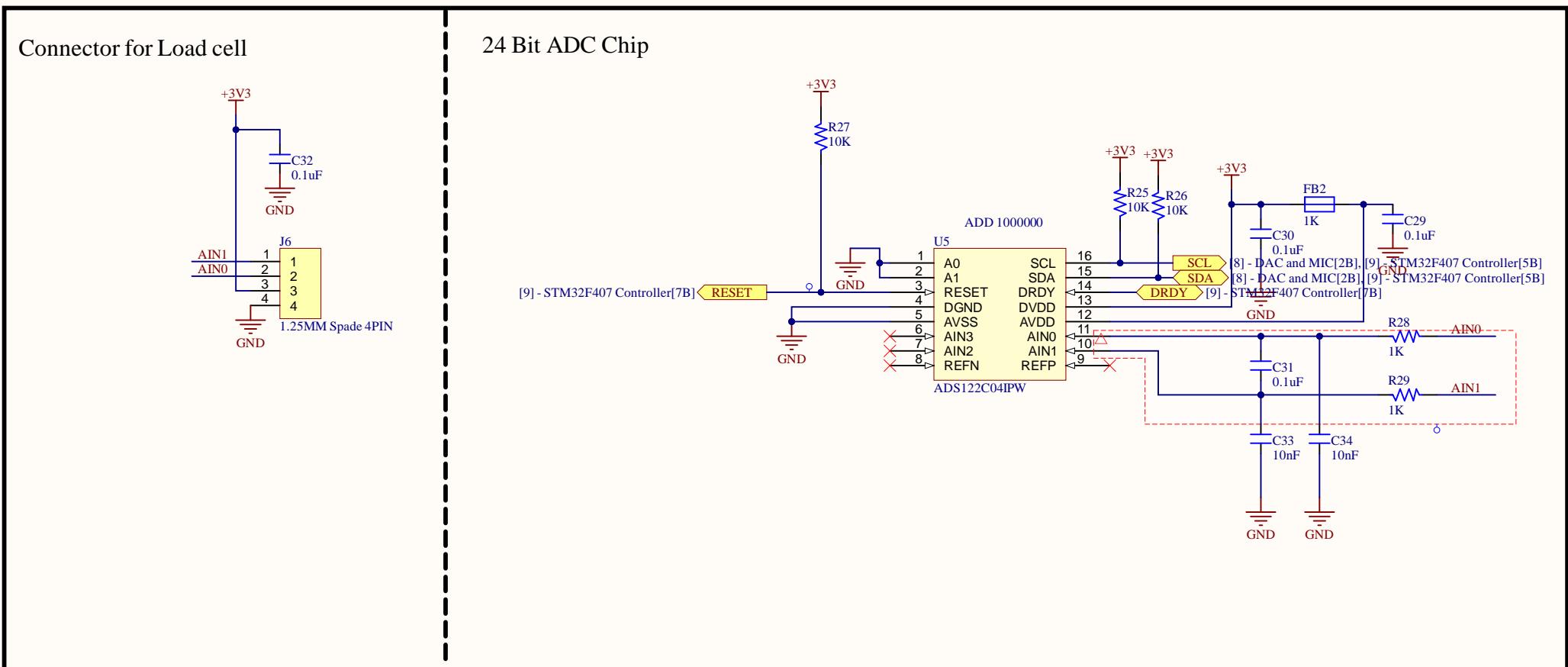
Paradisgränd 03
Umedalen
Umeå
Sweden

CH340C UART to USB Convertor



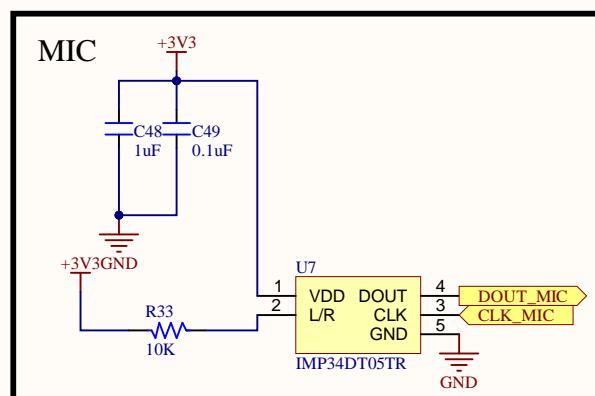
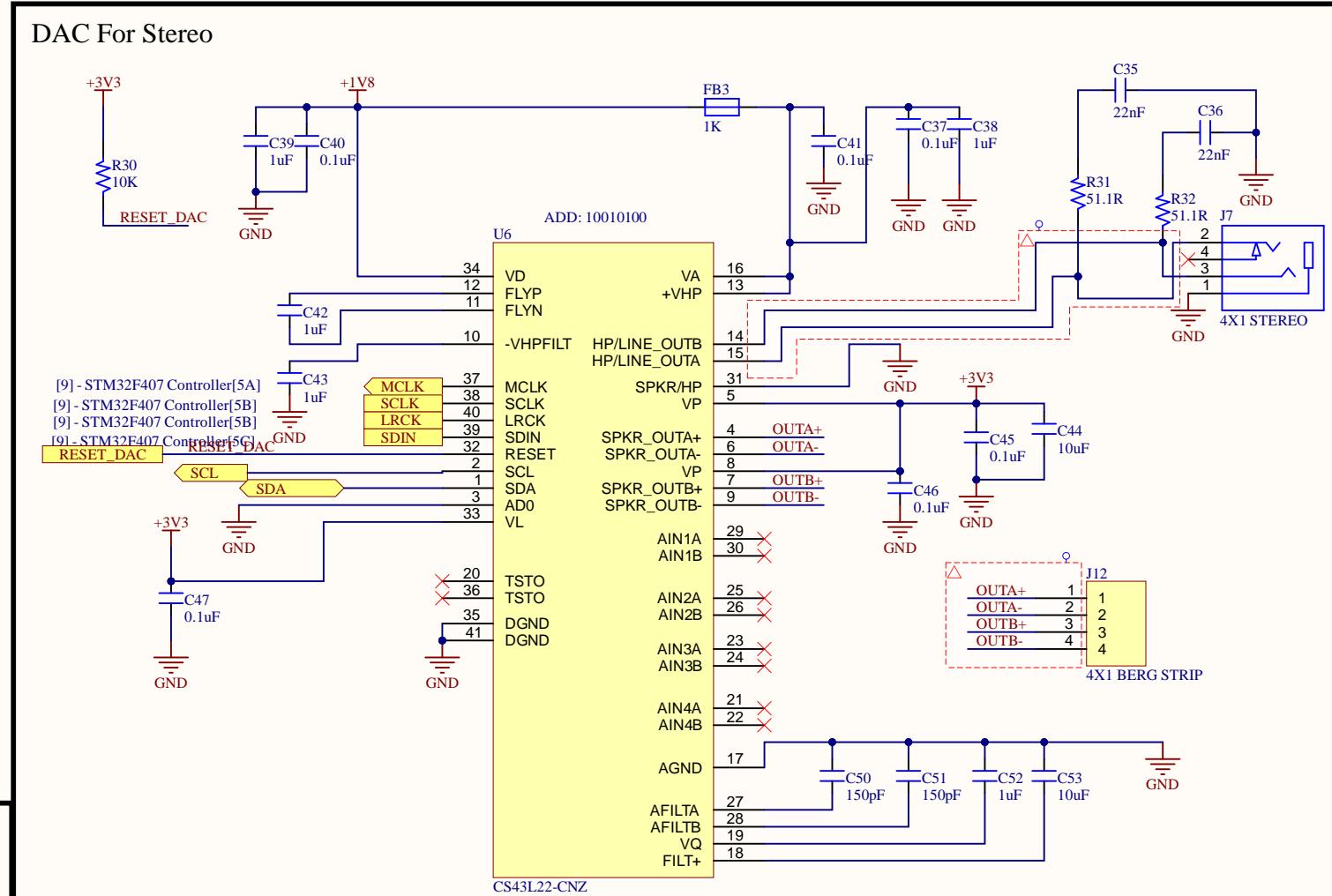
APPROVALS	DATE	PROJECT			
ENG: M Pourmand	2025-08-10	Mixed Signal Board			
DSN: M Pourmand	2025-08-10	PROJECT REVISION: Not in version control			
CHK: M Pourmand	2025-08-10	DOCUMENT REVISION: Not in version control			
TITLE					
CH340C UART to USB Convertion					
REFERENCE DOCUMENTS		SIZE	REV.		
BOM: BOM1		A4	*		
ASSY DWG: ASSY01		DWG NO.	1234		
FAB DWG: FAB01		PCB DWG:	Mixed Signal Board Project [6] - CH340C.SchDoc		
PCB DWG:	Mixed Signal Board Project [6] - CH340C.SchDoc	SHEET	6 OF 11		

Load cell driver by a 24-bit ADC



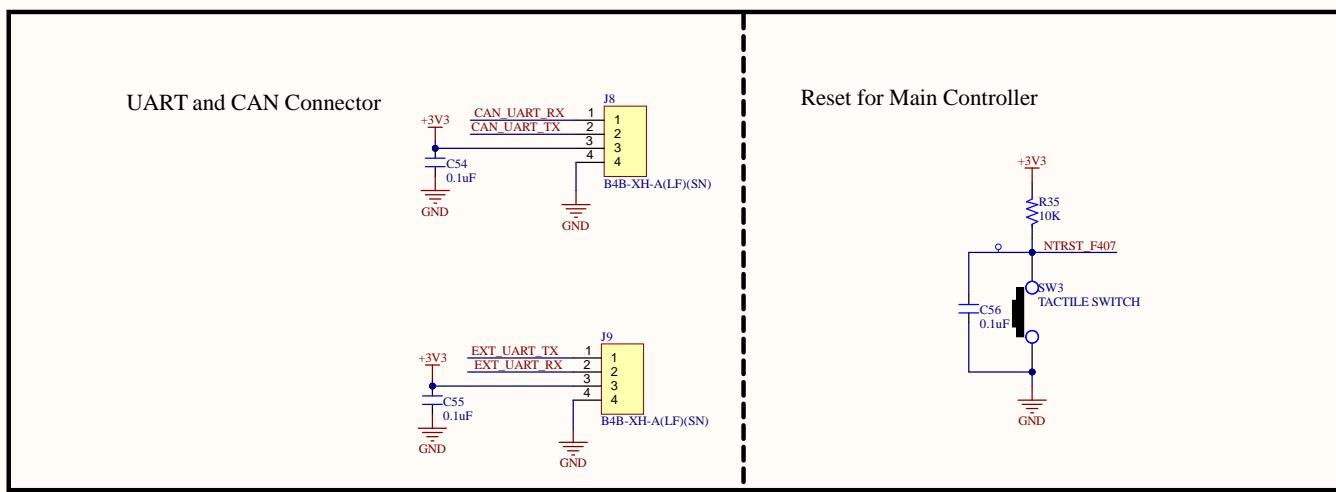
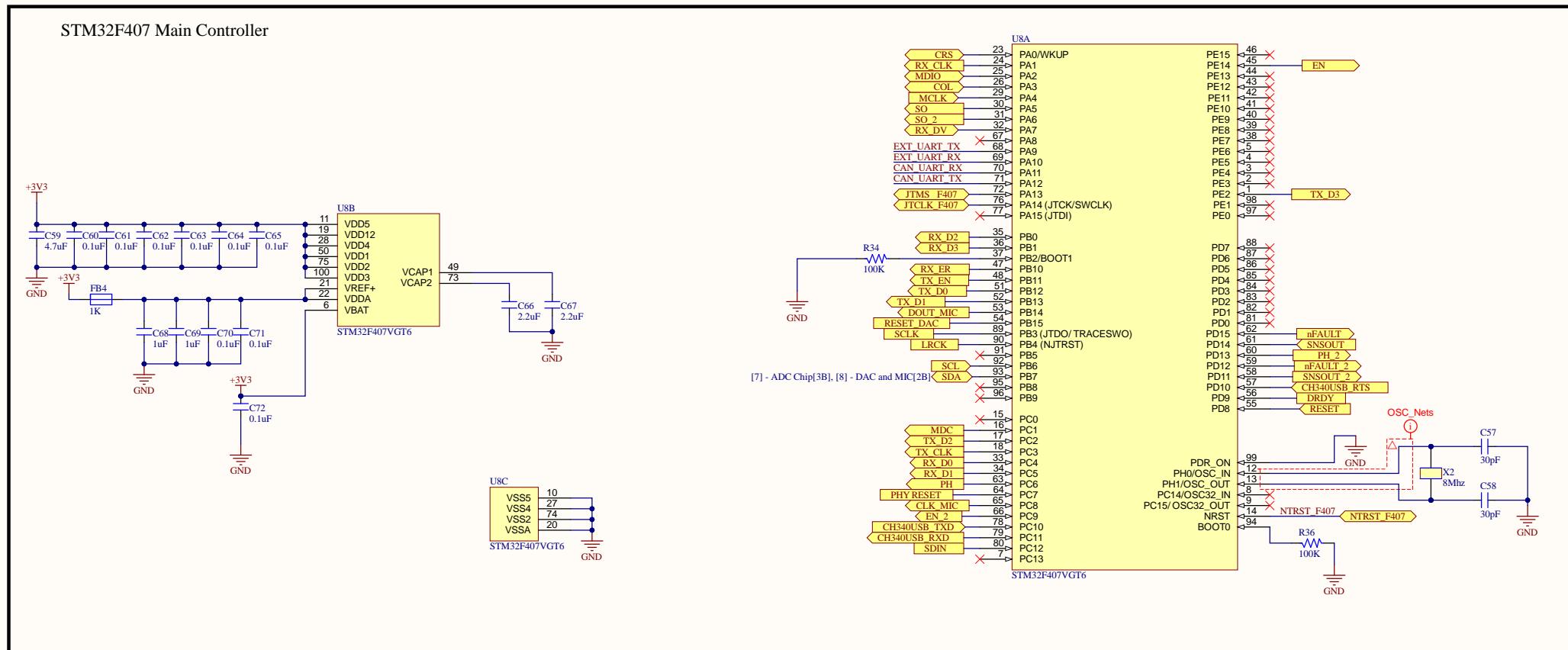
APPROVALS	DATE	PROJECT Mixed Signal Board				Paradisgränd 03 Umedalen Umeå [®] Sweden
ENG: M Pourmand	2025-08-28					
DSN: M Pourmand	2025-08-28					
CHK: M Pourmand	2025-08-28					
REFERENCE DOCUMENTS		PROJECT REVISION: Not in version control			DOCUMENT REVISION: Not in version control	DESIGN ITEM:
BOM: BOM1		TITLE				
ASSY DWG: ASSY01		SIZE A4		DWG NO.	1234	REV *
FAB DWG: FAB01						
PCB DWG: Mixed Signal Board Project_final		FILE NAME [7] - ADC Chip.SchDoc			SHEET 7	OF 11

Microphone and Stereo DAC



APPROVALS	DATE	PROJECT Mixed Signal Board				Paradisgränd 03 Umedalen Umeå [®] Sweden
ENG: M Pourmand	2025-08-28					
DSN: M Pourmand	2025-08-28					
CHK: M Pourmand	2025-08-28					
REFERENCE DOCUMENTS		PROJECT REVISION: Not in version control			DOCUMENT REVISION: Not in version control	DESIGN ITEM:
BOM: BOM1		TITLE				
ASSY DWG: ASSY01		SIZE A4	DWG NO. 1234			REV *
FAB DWG: FAB01						
PCB DWG: Mixed Signal Board Project_final		FILE NAME [8] - DAC and MIC.SchDoc			SHEET 8	OF 11

STM32F407-- Main Controller

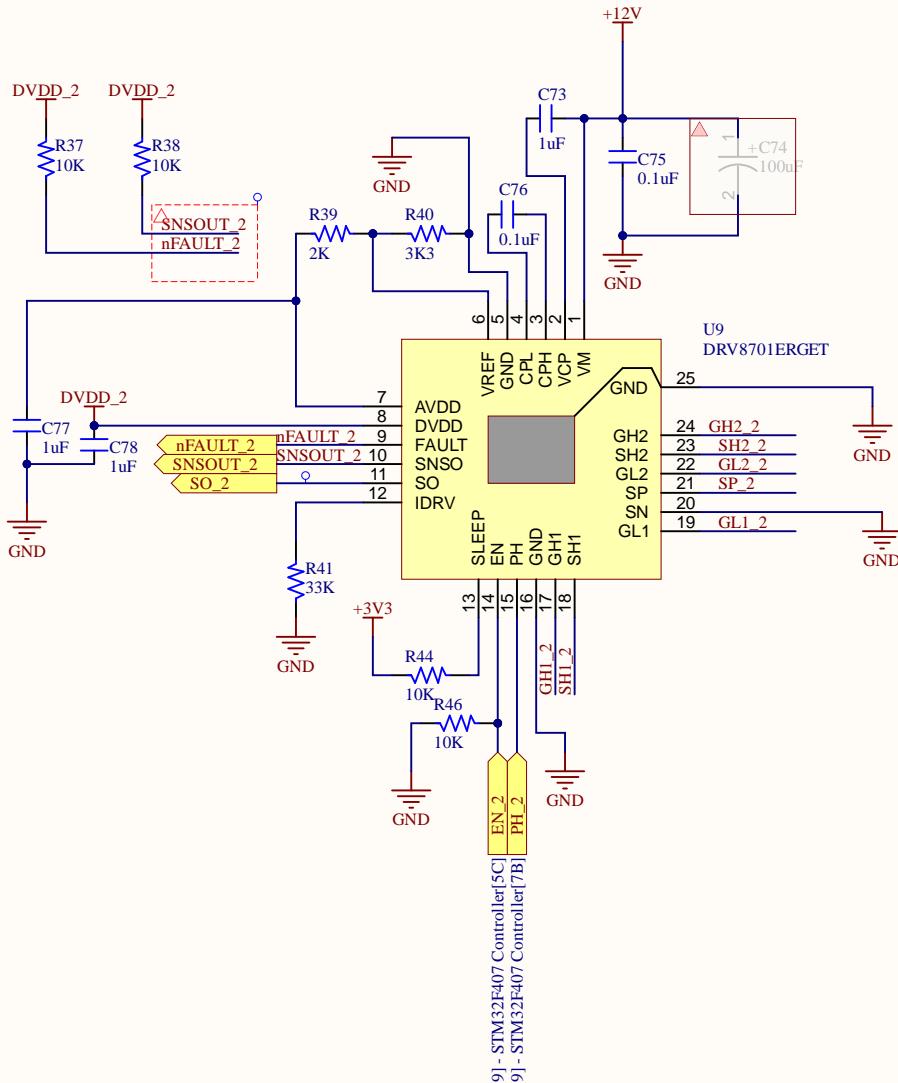


APPROVALS		DATE	PROJECT		Paradisgränd 03 Umeå Sweden
ENG:	M.Pourmand	2025-08-10	Mixed Signal Board		
DSN:	M.Pourmand	2025-08-10	PROJECT REVISION:	Not in version control	
CHK:	M.Pourmand	2025-08-10	TITLE	Not in version control	DESIGN ITEM:
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ASSY DWG:	ASSY01		SIZE	DWG NO.	
FAB DWG:	FAB01		A3	1234	REV *
PCB DWG:	Mixed Signal Board Project_final		FILE NAME	[9] - STM32F407 Controller.SchDoc	SHEET 9 OF 11

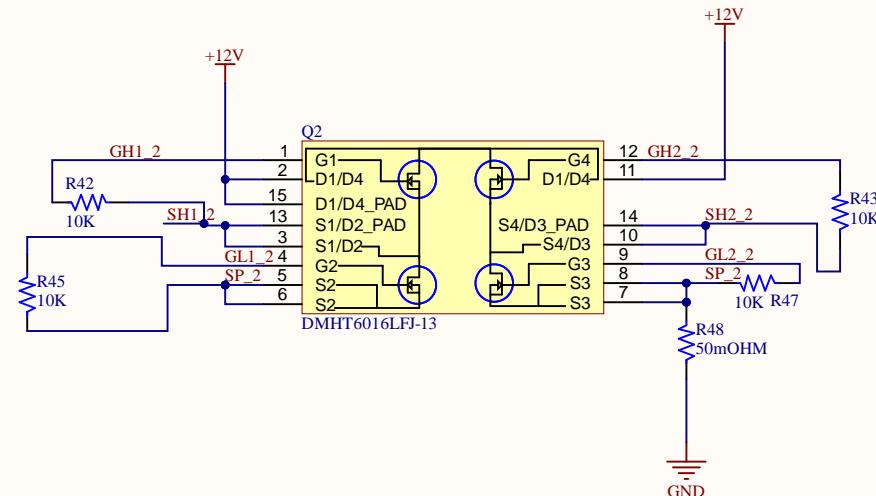
STM32F407-- Main Controller

DRV8701 Motor Driver-2

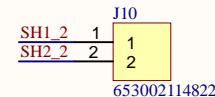
Motor Driver DRV8701



N-MOSFET

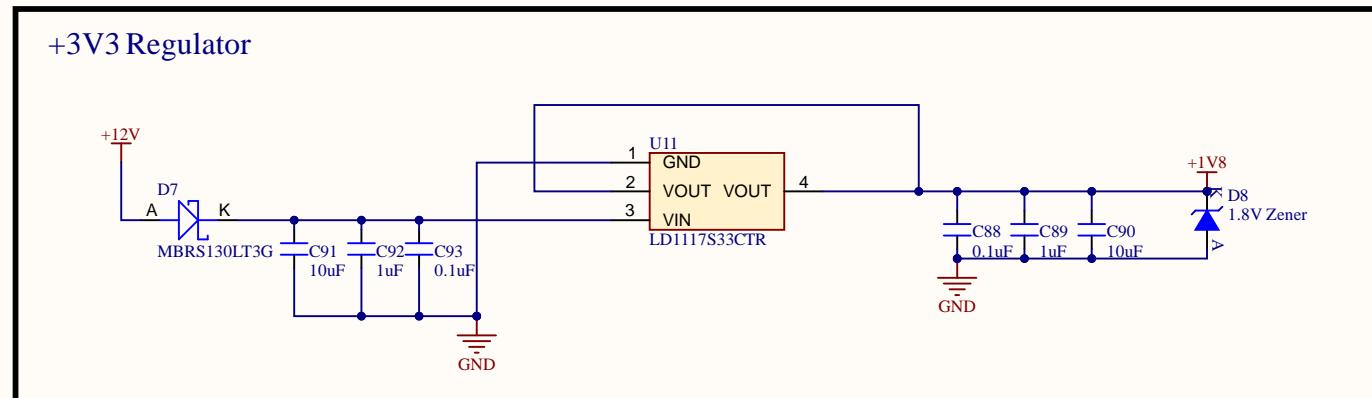
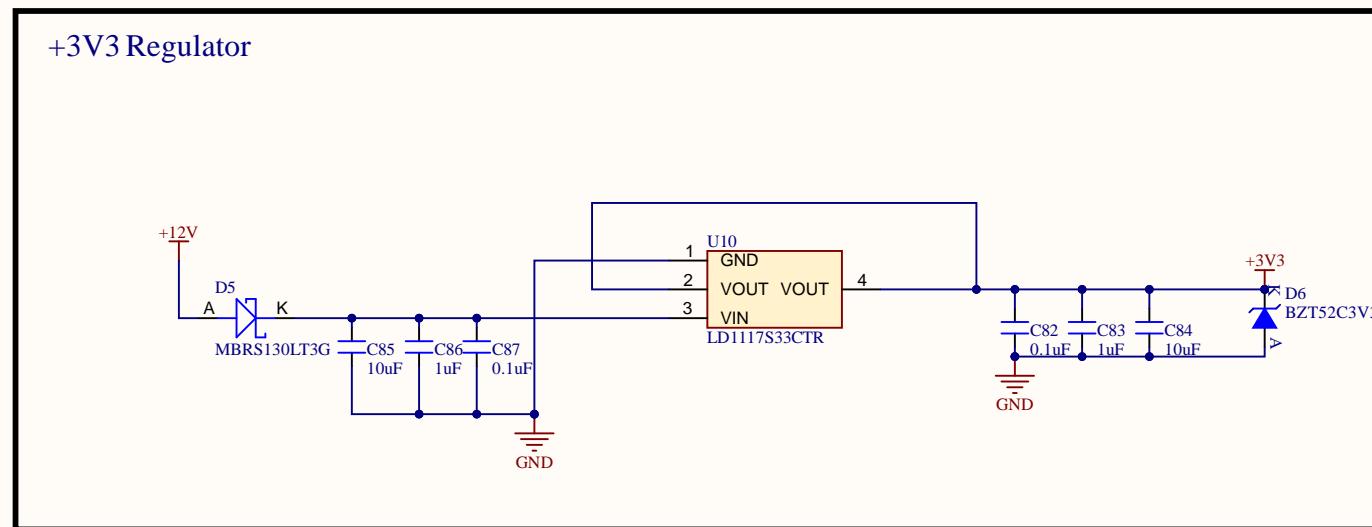
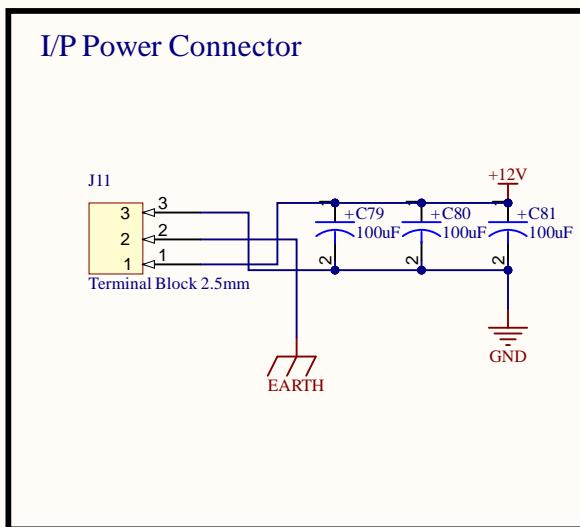


Connector for Motor -2



APPROVALS	DATE	PROJECT		Paradisgränd 03 Umedalen Umeå Sweden			
ENG:	M Pourmand	Mixed Signal Board	REV:				
DSN:	M Pourmand	PROJECT REVISION: Not in version control		DOCUMENT REVISION: Not in version control			
CHK:	M Pourmand	DESIGN ITEM:					
TITLE							
DRV8701 Motor Driver-2							
BOM:	BOM1	SIZE	DWG NO.				
ASSY DWG:	ASSY01	A4	1234	REV *			
FAB DWG:	FAB01						
PCB DWG:	Mixed Signal Board Project	FILE NAME	[10] - Motor Driver- 2.SchDoc	SHEET 10 OF 11			

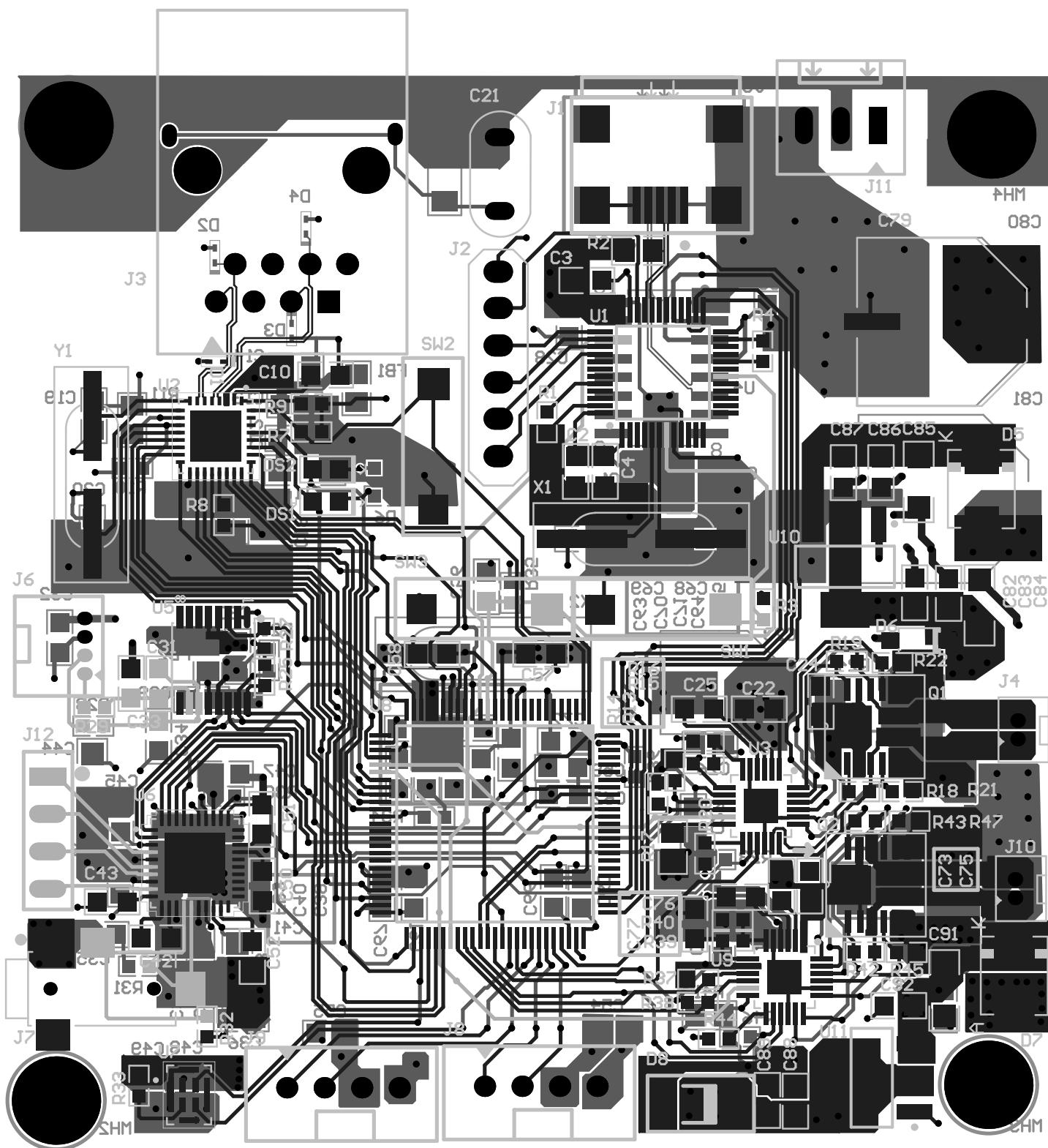
Power Supply



APPROVALS		DATE	PROJECT			
ENG:	M Pourmand	2025-08-13	Mixed Signal Board			
DSN:	M Pourmand	2025-08-13	PROJECT REVISION: Not in version control			
CHK:	M Pourmand	2025-08-13	DOCUMENT REVISION: Not in version control			
REFERENCE DOCUMENTS						
BOM: BOM1						
ASSY DWG: ASSY01		SIZE A4		DWG NO. 1234		
FAB DWG: FAB01		REV *				
PCB DWG: Mixed Signal Board Project		SHEET 11 OF 11				



Paradisgränd 03
Umedalen
Umeå
Sweden



Board Stack Report