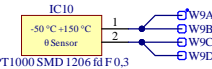
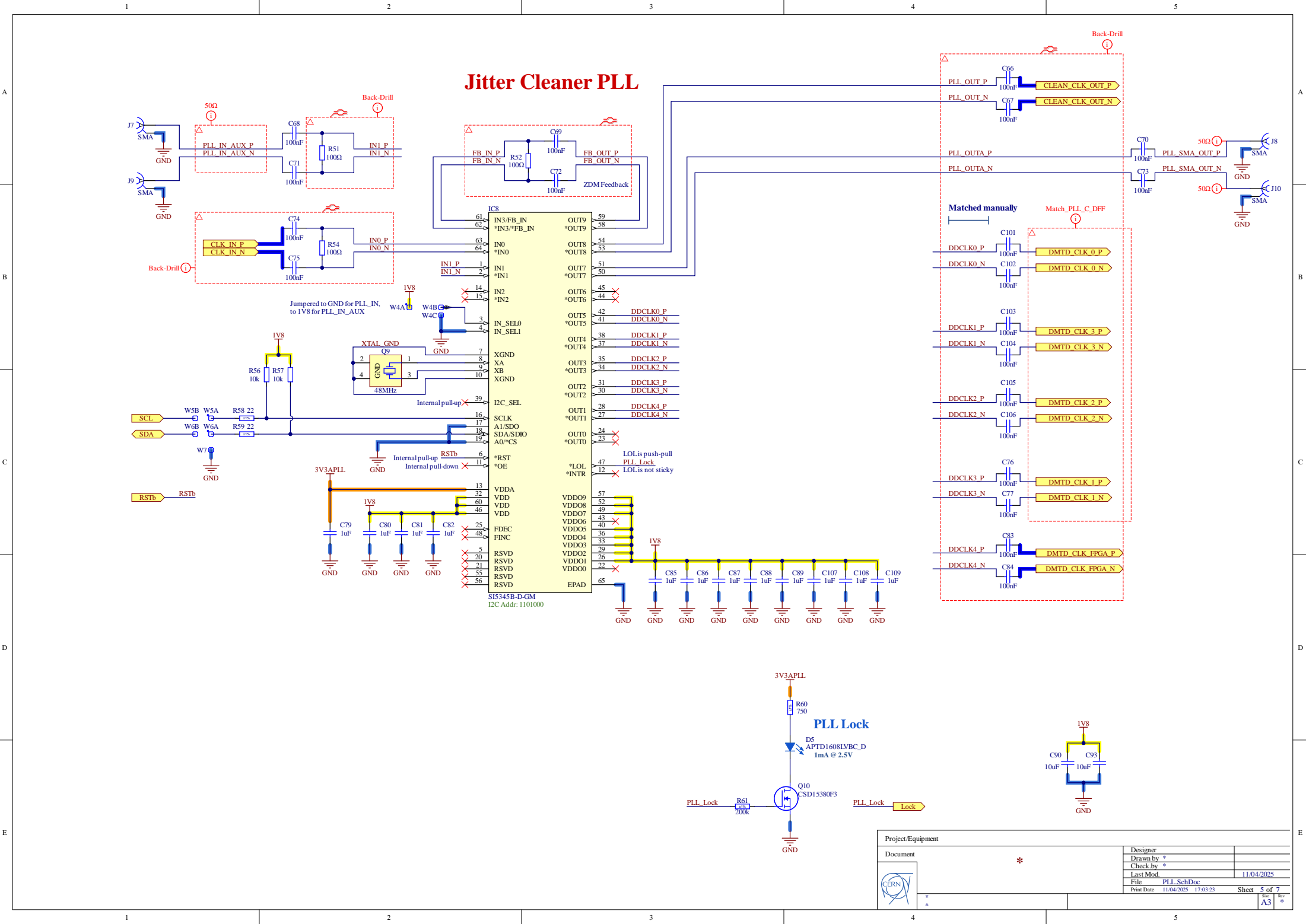


Temperature Sensor



Project/Equipment		Designer	
Document		Drawn by *	
		Check by *	
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		File	SFP_SchDoc
		Print Date	11/04/2025 17:03:21
		Sheet	3 of 7
			A3

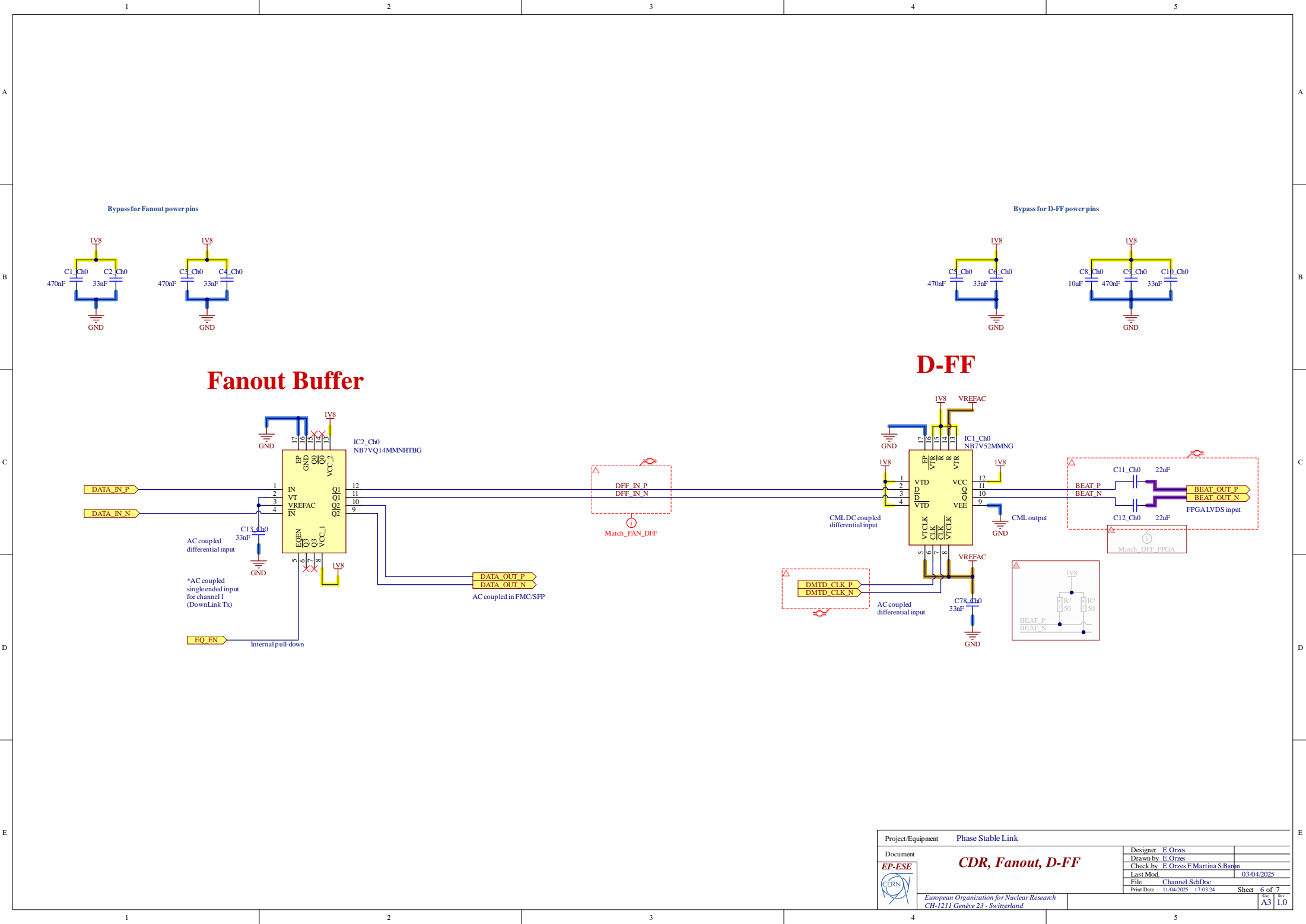




Jitter Cleaner PLL


PLL Lock


Project/Equipment		Designer	
Document		Drawn by *	
		Check by *	
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		File	
		Print Date	
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		Rev	



Fanout Buffer

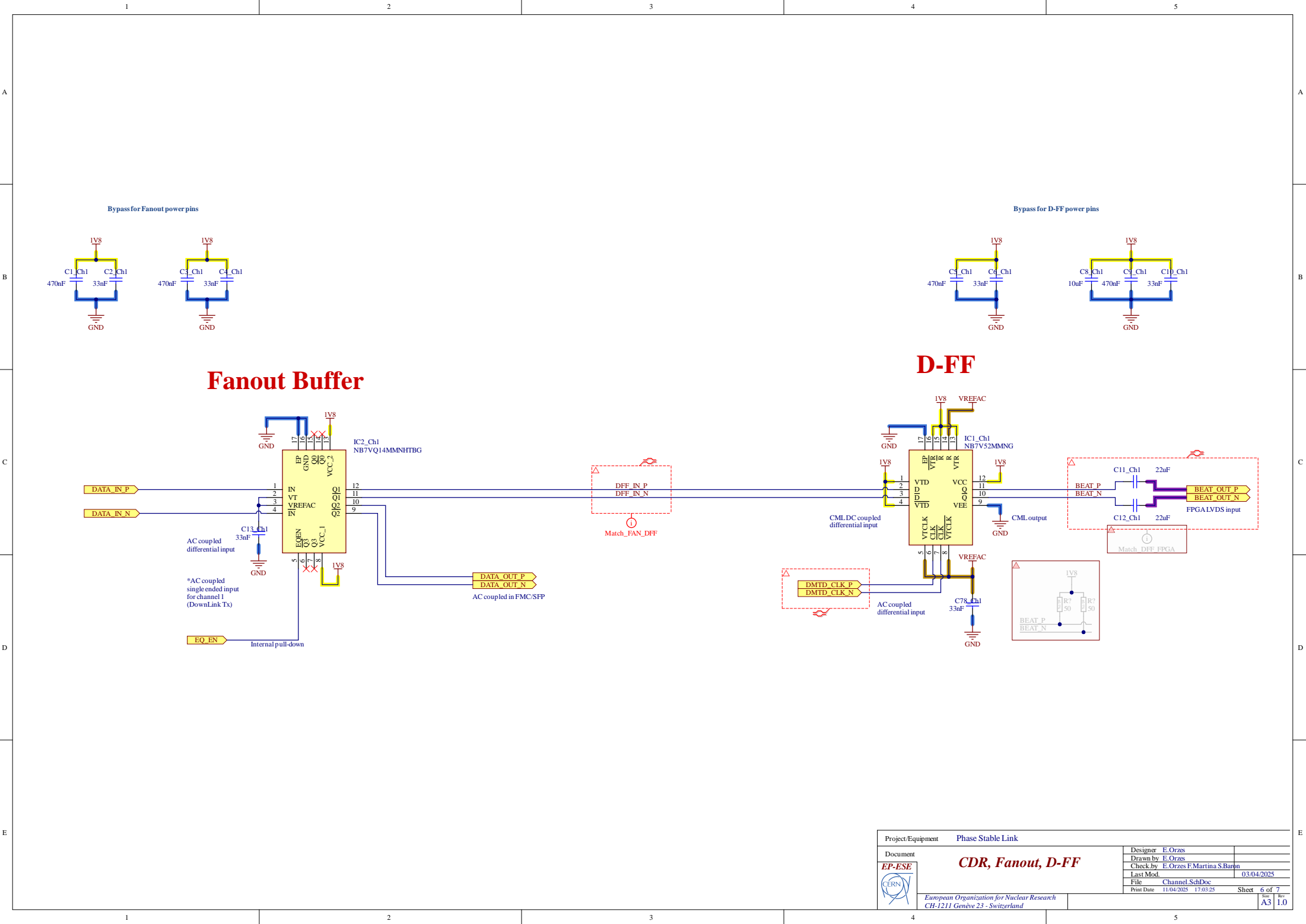
D-FF

Project/Equipment		Phase Stable Link	
Document		Designer E.Orzes	
		Drawn by E.Orzes	
		Check by E.Orzes F.Martina S.Barni	
		Last Mod. 03/04/2025	
		File Channel.SchDoc	
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CDR, Fanout, D-FF



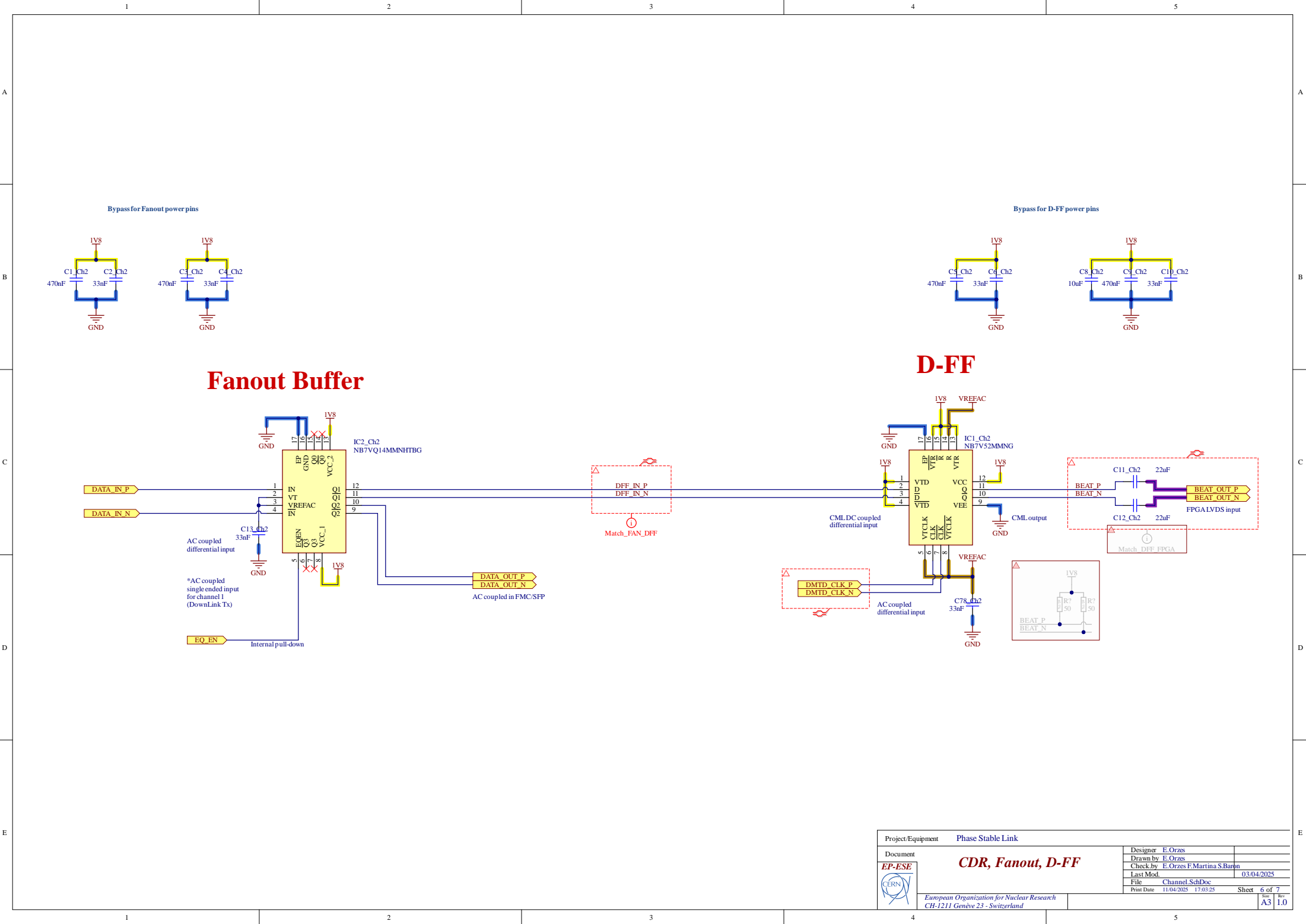
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D-FF

Project/Equipment		Phase Stable Link	
Document		Designer E.Orzes	
		Drawn by E.Orzes	
		Check by E.Orzes F.Martina S.Barni	
		Last Mod. 03/04/2025	
		File Channel.SchDoc	
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		Sheet 6 of 7	
		A3 1.0	


CDR, Fanout, D-FF

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Fanout Buffer

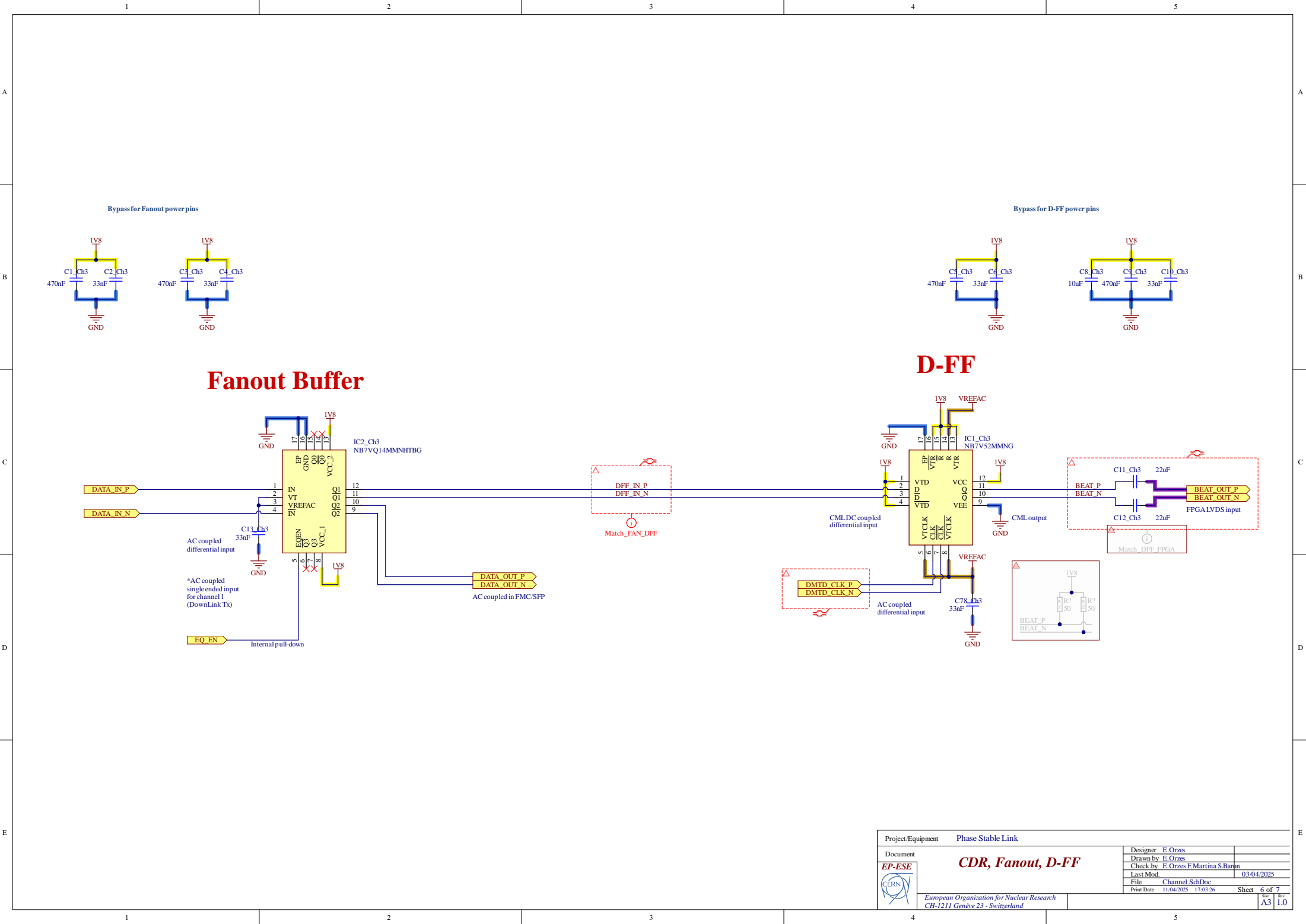
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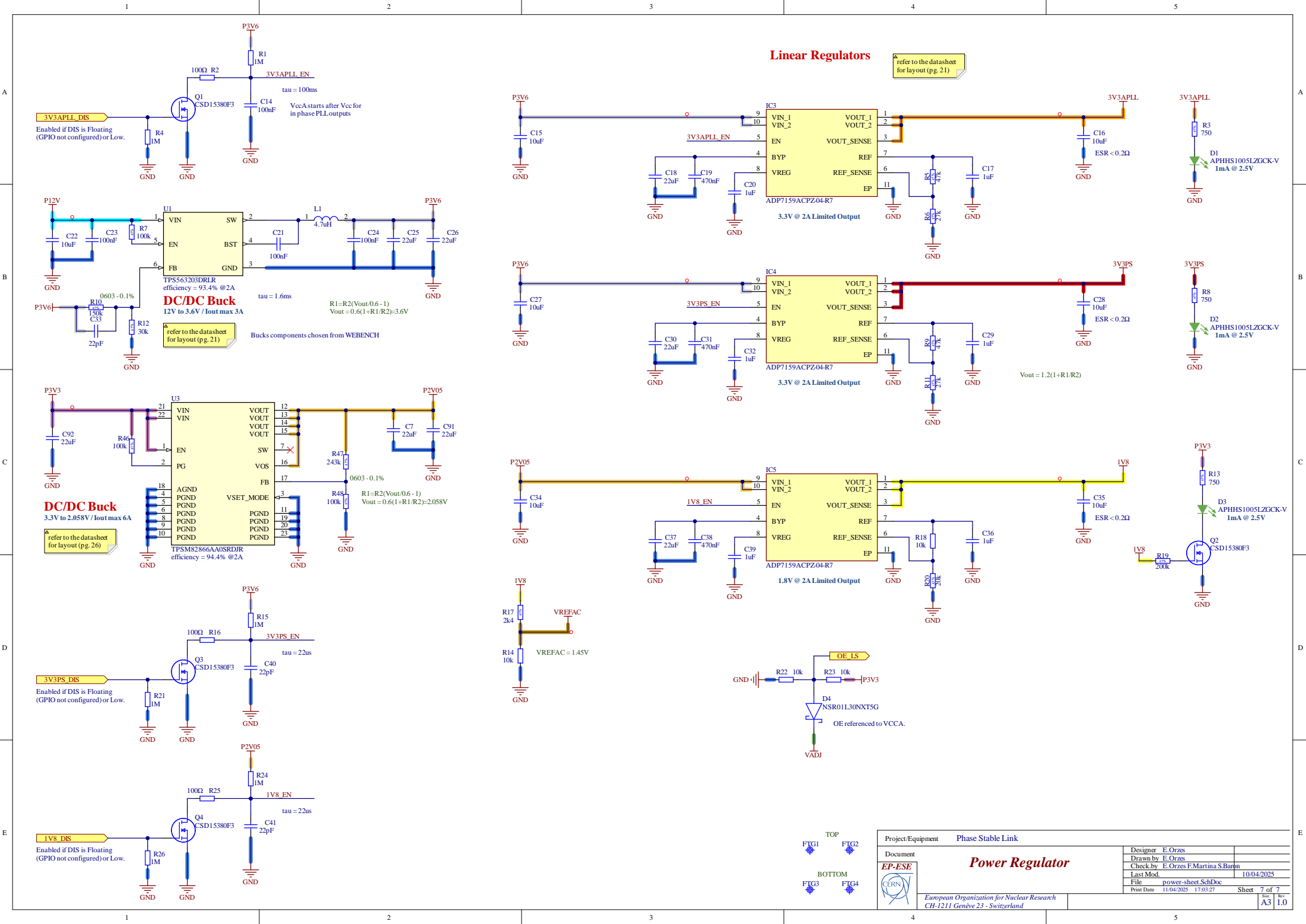
Project/Equipment		Phase Stable Link	
Document		Designer E.Orzes	
		Drawn by E.Orzes	
		Check by E.Orzes F.Martina S.Barni	
		Last Mod. 03/04/2025	
		File Channel.SchDoc	
		Print Date 11/04/2025 17:03:25	
		Sheet 6 of 7	
		A3 1.0	

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Linear Regulators

refer to the datasheet for layout (pg. 21)

A	<div>3V3APLL_DIS</div> <div>Enabled if DIS is Floating (GPIO not configured) or Low.</div>		<div>Q1</div> <div>CSD15380F3</div> <div>tau = 100ns</div>		A
			<div>VccA starts after Vcc for in phase PLL-outputs</div>		
B	<div>P12V</div> <div>C22 10uF</div> <div>C23 100nF</div> <div>R7 100k</div> <div>U1</div> <div>TPS563203DR1R</div> <div>efficiency = 93.4% @ 2A</div> <div>DC/DC Buck</div> <div>12V to 3.6V / Iout max 3A</div> <div>tau = 1.6ms</div> <div>R1=R2(Vout/0.6 - 1)</div> <div>Vout = 0.6(1+R1/R2)=3.6V</div> <div>refer to the datasheet for layout (pg. 21)</div> <div>Bucks components chosen from WEBENCH</div>		<div>P3V6</div> <div>L1 4.7uH</div> <div>C21 100nF</div> <div>C24 100nF</div> <div>C25 22uF</div> <div>C26 22uF</div>		B
C	<div>P3V3</div> <div>C92 22uF</div> <div>R46 100k</div> <div>U3</div> <div>TPSM82866AA0SRDJR</div> <div>efficiency = 94.4% @ 2A</div> <div>DC/DC Buck</div> <div>3.3V to 2.058V / Iout max 6A</div> <div>refer to the datasheet for layout (pg. 26)</div>		<div>P2V05</div> <div>C7 22uF</div> <div>C91 22uF</div> <div>R47 243k</div> <div>R48 100k</div> <div>R1=R2(Vout/0.6 - 1)</div> <div>Vout = 0.6(1+R1/R2)=2.058V</div>		C
D	<div>3V3PS_DIS</div> <div>Enabled if DIS is Floating (GPIO not configured) or Low.</div>		<div>Q3</div> <div>CSD15380F3</div> <div>tau = 22us</div>		D
			<div>P3V6</div> <div>R15 1M</div> <div>R16 100k</div> <div>C40 22pF</div>		
E	<div>1V8_DIS</div> <div>Enabled if DIS is Floating (GPIO not configured) or Low.</div>		<div>Q4</div> <div>CSD15380F3</div> <div>tau = 22us</div>		E
			<div>P2V05</div> <div>R24 1M</div> <div>R25 100k</div> <div>C41 22pF</div>		

A	<div>P3V6</div> <div>C15 10uF</div> <div>IC3</div> <div>ADP7159ACPZ04-R7</div> <div>3.3V @ 2A Limited Output</div>		A
	<div>VOUT_1</div> <div>VOUT_2</div> <div>VOUT_SENSE</div> <div>EN</div> <div>BYP</div> <div>VREG</div> <div>REF</div> <div>REF_SENSE</div> <div>EP</div>		
B	<div>P3V6</div> <div>C27 10uF</div> <div>IC4</div> <div>ADP7159ACPZ04-R7</div> <div>3.3V @ 2A Limited Output</div>		B
	<div>VOUT_1</div> <div>VOUT_2</div> <div>VOUT_SENSE</div> <div>EN</div> <div>BYP</div> <div>VREG</div> <div>REF</div> <div>REF_SENSE</div> <div>EP</div>		
C	<div>P2V05</div> <div>C34 10uF</div> <div>IC5</div> <div>ADP7159ACPZ04-R7</div> <div>1.8V @ 2A Limited Output</div>		C
	<div>VOUT_1</div> <div>VOUT_2</div> <div>VOUT_SENSE</div> <div>EN</div> <div>BYP</div> <div>VREG</div> <div>REF</div> <div>REF_SENSE</div> <div>EP</div>		
D	<div>1V8</div> <div>R17 2k4</div> <div>R14 10k</div> <div>VREFAC = 1.45V</div>		D
	<div>OE_1S</div> <div>R22 10k</div> <div>R23 10k</div> <div>P3V3</div> <div>D4</div> <div>NSR01130NXTSG</div> <div>OE referenced to VCCA.</div>		
E	<div>TOP</div> <div>FTG1</div> <div>FTG2</div> <div>BOTTOM</div> <div>FTG3</div> <div>FTG4</div>		E

Project/Equipment		Phase Stable Link	
Document		Designer E.Orzes	
EP-ESE		Drawn by E.Orzes	
CERN		Check by E.Orzes F.Martina S.Baron	
		Last Mod. 10/04/2025	
File		power-sheet_SchDoc	
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