

$$V_{out} = 0.8 * (R_{143}/R_{148} + 1) = 1.81 \text{ V}$$

**3.3 V**

**+3.3 V**

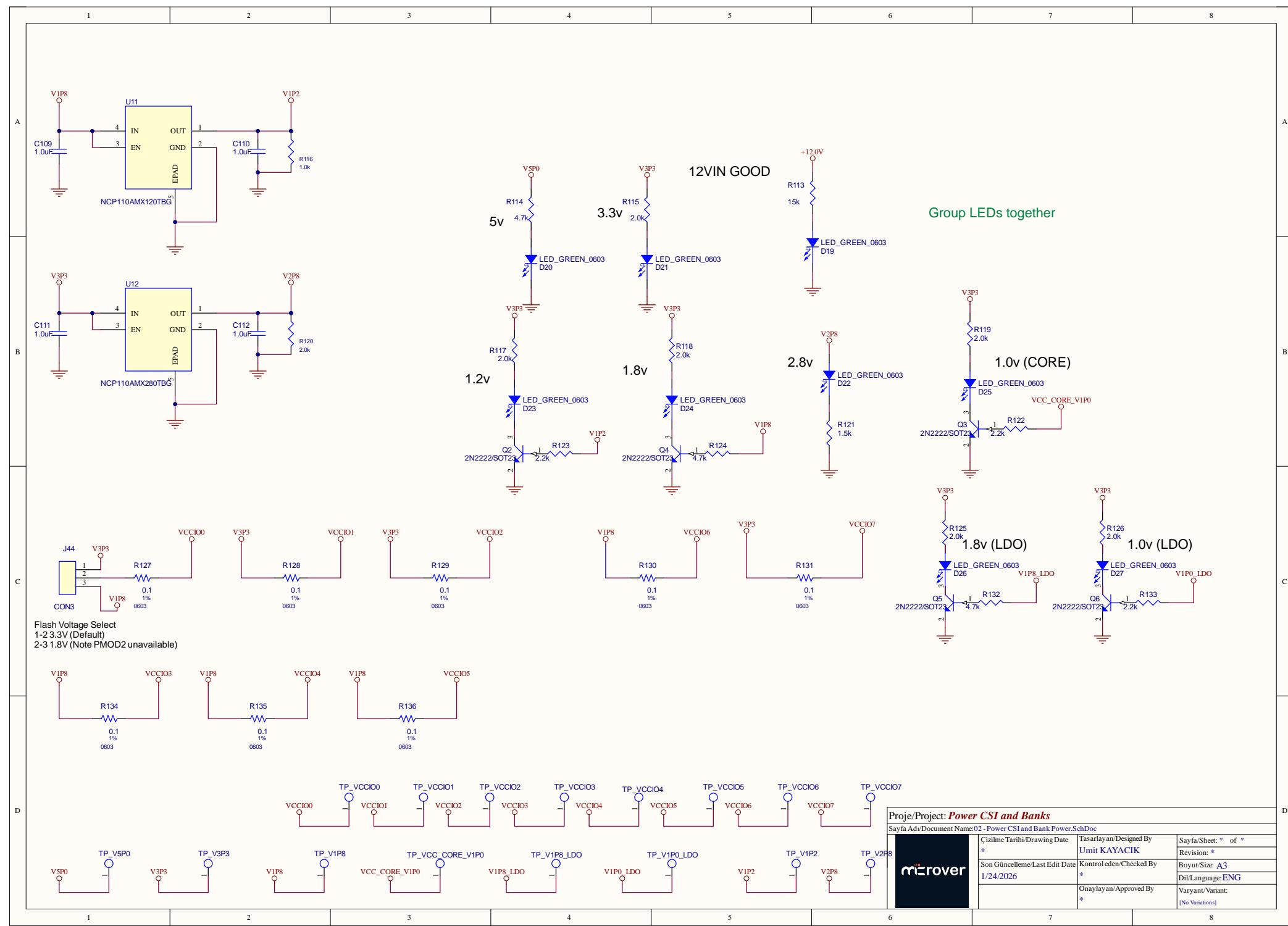
**+3.3 V 1.35 A**

**1.8 V**

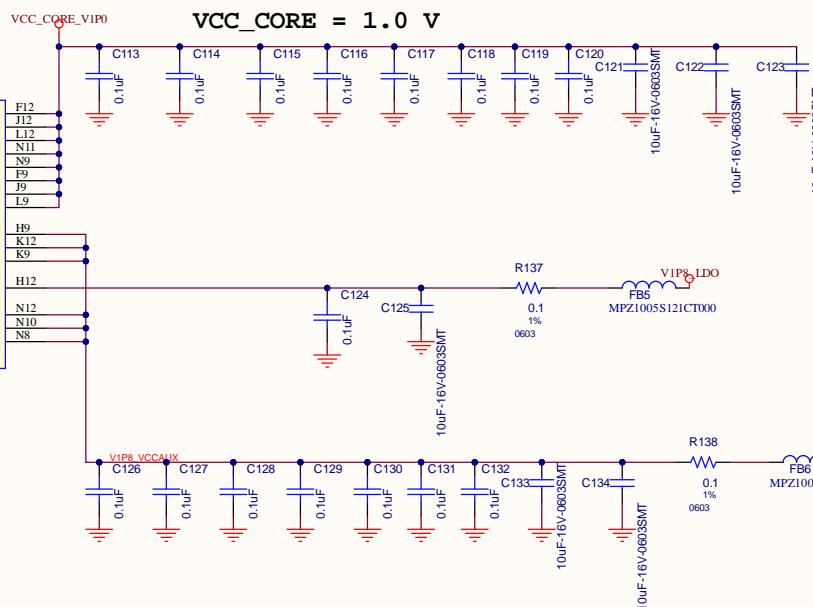
**D**

Proj/Project: Power Regulators			
Sayfa Adı/Document Name: 01 - Power Regulators.SchDoc			

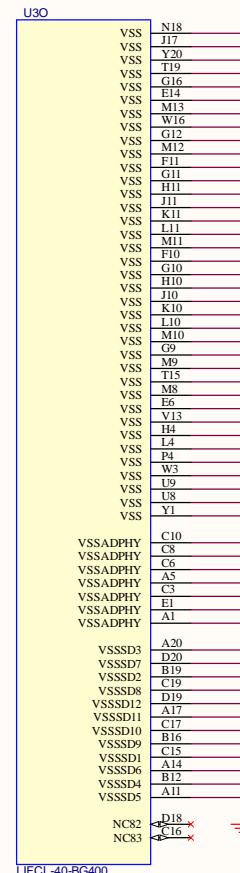
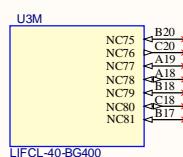
Çizilme Tarihi/Drawing Date * Son Güncelleme/Last Edit Date 1/23/2026	Tasarlayan/Designed By Umit KAYACIK Kontrol eden/Checked By * Dil/Language: ENG	Sayfa/Sheet: * of * Revision: * Onaylayan/Approved By Variant/Variant: [No Variations]



A



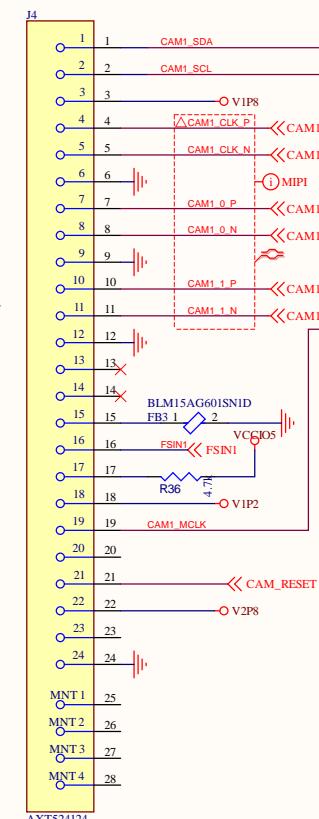
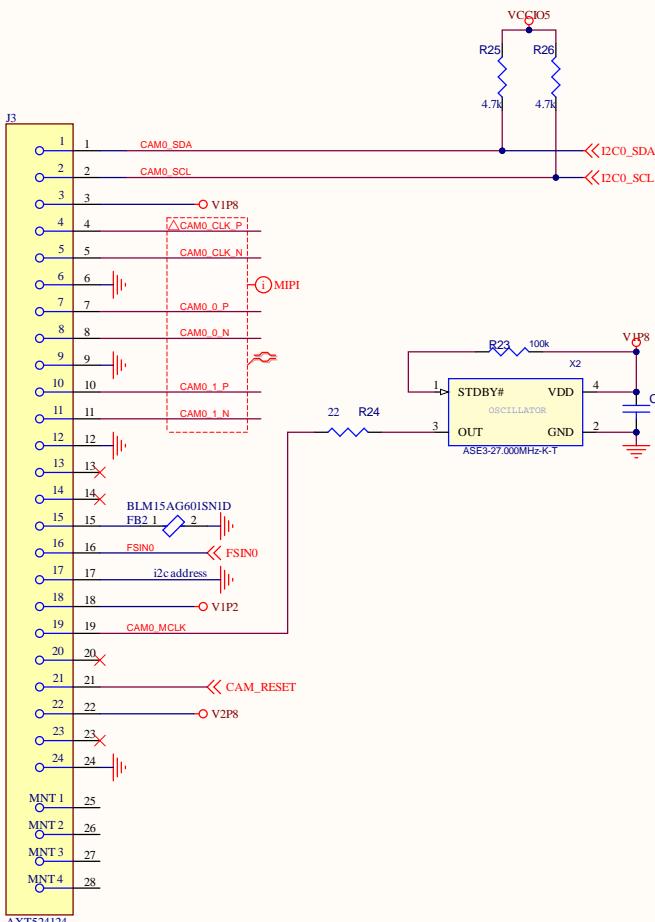
LIFCL-40-BG400

**Proje/Project: Power Decoupling**

Sayfa Adı/Document Name: 03 - Power Decoupling SchDoc

	Çizilme Tarihi/Drawing Date	Tasarlayan/Designed By	Sayfa/Sheet: * of *
	* Son Güncelleme/Last Edit Date 1/23/2026	Umit KAYACIK Kontrol eden/Checked By * Dil/Language: ENG	Revision: * Boyut/Size: A3 Onaylayan/Approved By * Variant/Variant: [No Variations]

A



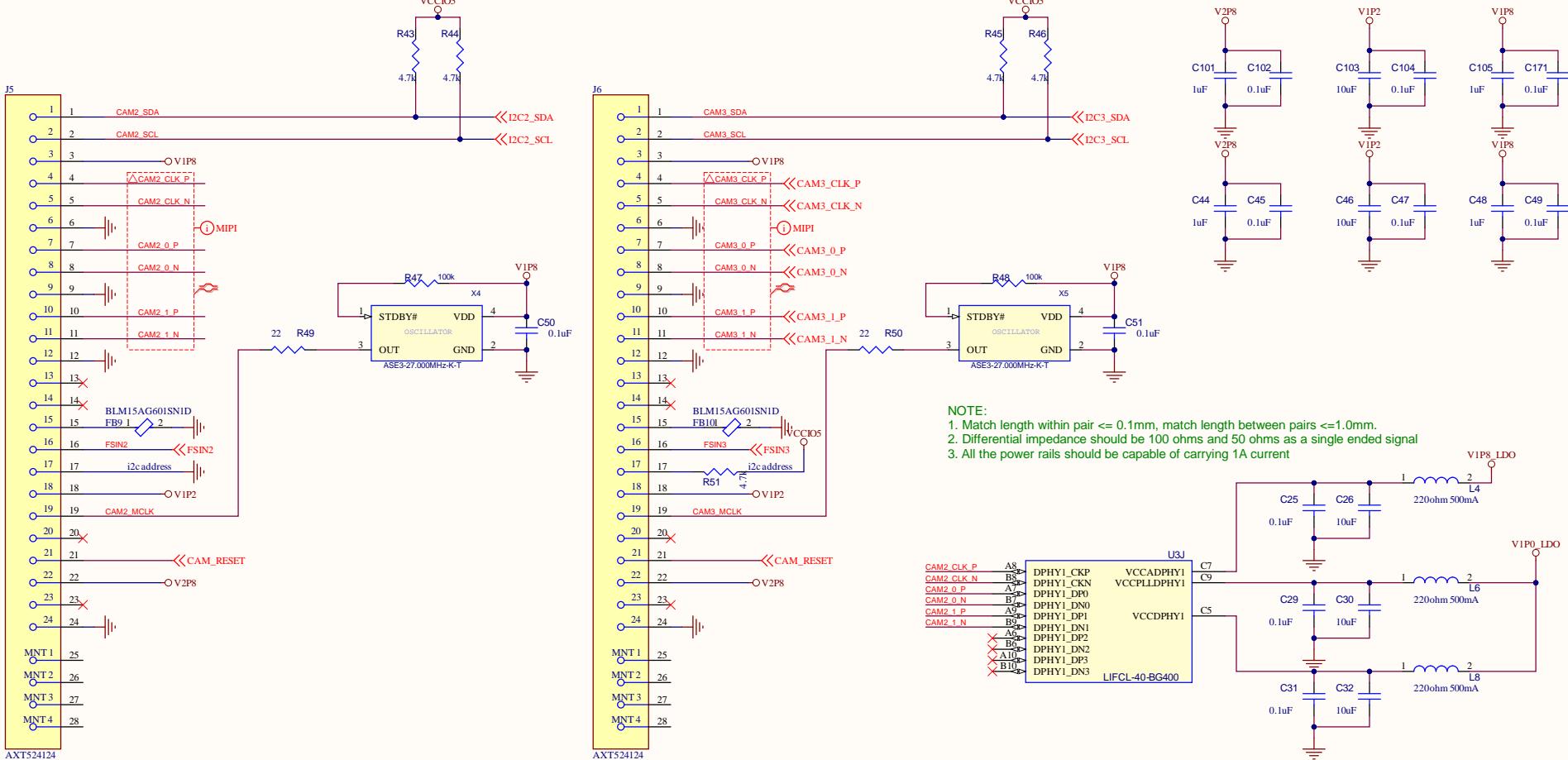
NOTE: Place close to FPGA

NOTE:

1. Match length within pair  $\leq 0.1\text{mm}$ , match length between pairs  $\leq 1.0\text{mm}$ .
2. Differential impedance should be 100 ohms and 50 ohms as a single ended signal.
3. All the power rails should be capable of carrying 1A current.

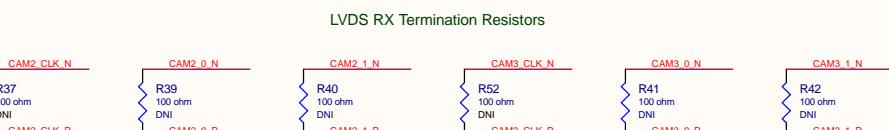


Proje/Project: Camera Interface (DPHYs)			
Sayfa Adı/Document Name:	Drawing Date:	Tasarlayan/Designed By:	Sayfa/Sheet: * of *
04 - Camera Interface.SchDoc	*	Ümit KAYACIK	Revision: *
Son Güncelleme/Last Edit Date:	1/24/2026	Kontrol eden/Checked By:	Boyu/Size: A3
			Dil/Language: ENG
			Onaylayan/Approved By:
			Varyant/Variant: *
			[No Variations]



**NOTE:**

1. Match length within pair <= 0.1mm, match length between pairs <= 1.0mm.
2. Differential impedance should be 100 ohms and 50 ohms as a single ended signal
3. All the power rails should be capable of carrying 1A current



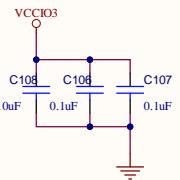
NOTE: Place close to FPGA

Keep LEDs away from Camera

Proje/Project: Camera Interface (DPHY)			
Sayfa Adı/Document Name: 05 - Camera Interface 2.SchDoc	Çizilme Tarihi/Drawing Date	Tasarlayan/Designed By	Sayfa/Sheet: * of *
	* Son Güncelleme/Last Edit Date 1/24/2026	Ümit KAYACIK Kontrol eden/Checked By * Boyu/Size: A3 Dil/Language: ENG	Revision: * Onaylayan/Approved By * Variant/Variant: [No Variations]

1 2 3 4 5 6 7 8

A



VCCIO3

C108

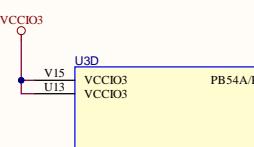
0.1uF

C109

0.1uF

C107

0.1uF



V15

U13

VCCIO3

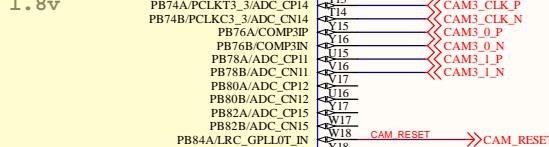
U3D

VCCIO3

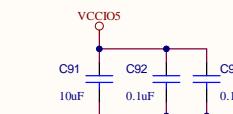
VCCIO3

**Bank 3**

**1.8v**



LIFCL-40-BG400



VCCIO5

C91

10uF

C92

0.1uF

C93

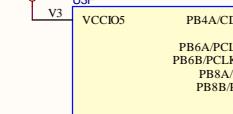
0.1uF

VCCIO5

V3

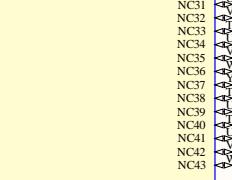
U3F

VCCIO5



**Bank 5**

**1.8v**



LIFCL-40-BG400

VCCIO4

C94

10uF

0.1uF

VCCIO4

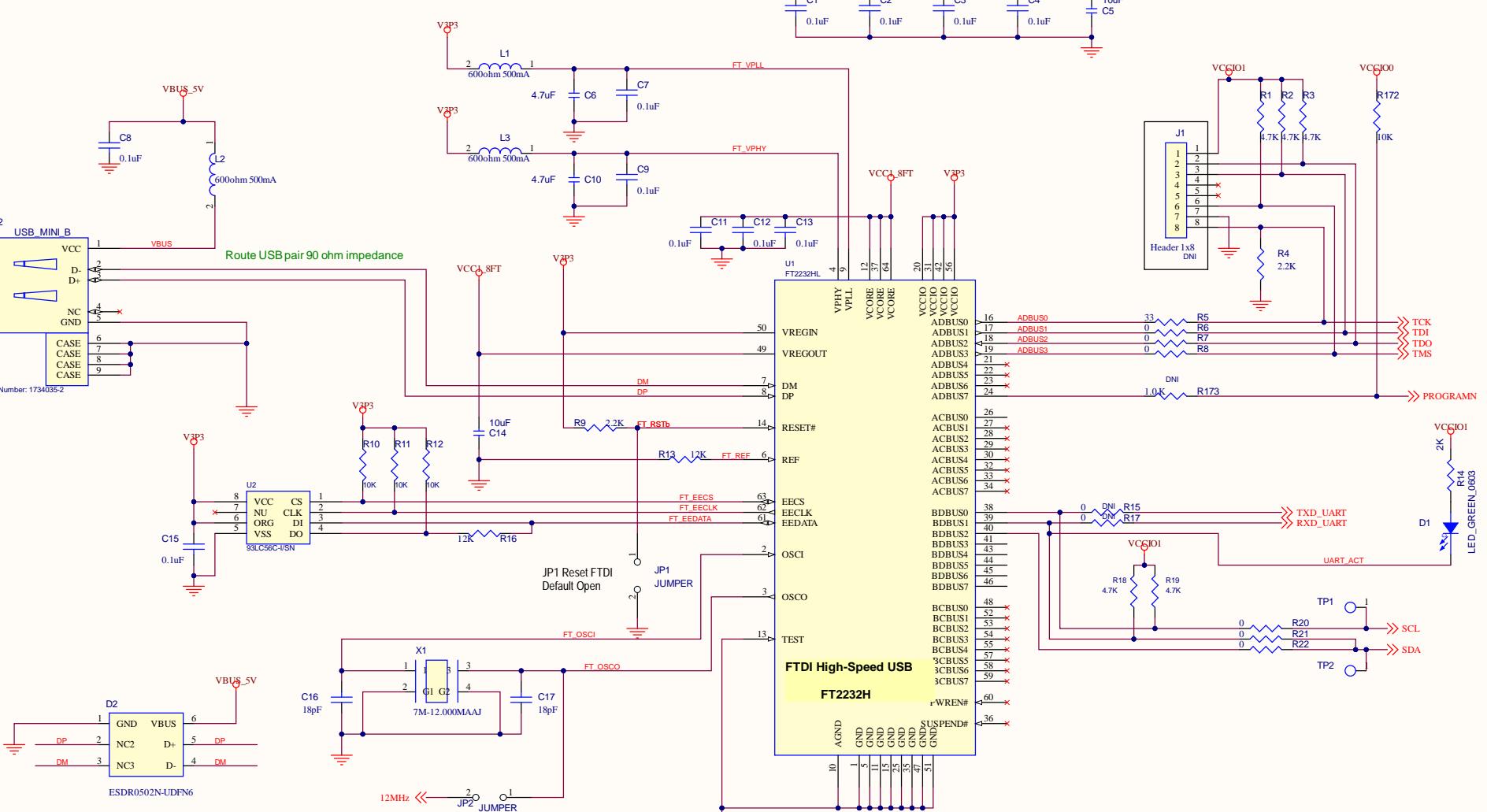
T9

V8

CSL\_TX

 </p

1 2 3 4 5 6 7 8

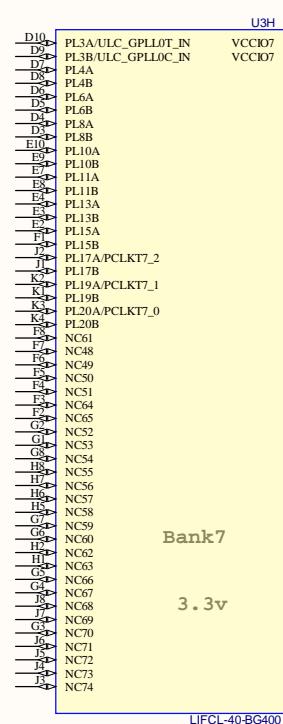
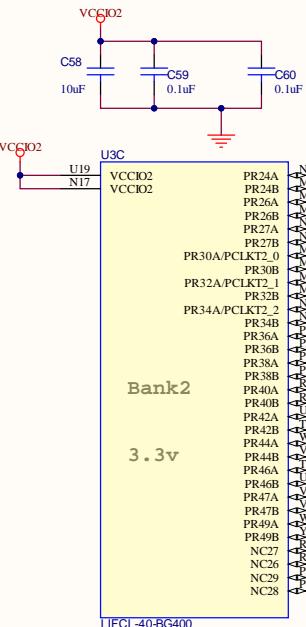
**Proje/Project: USB Interface**

Sayfa Adı/Document Name: 07 - USB Interface.SchDoc

	Çizilme Tarihi/Drawing Date * 1/24/2026	Tasarlayan/Designed By Umit KAYACIK	Sayfa/Sheet: * of *
	Son Güncelleme/Last Edit Date * 1/24/2026	Kontrol eden/Checked By Boyuť/Size: A3	Revision: *
		Dil/Language: ENG	Onaylayan/Approved By Variant/Variant: * [No Variations]

1 2 3 4 5 6 7 8

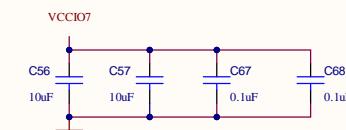
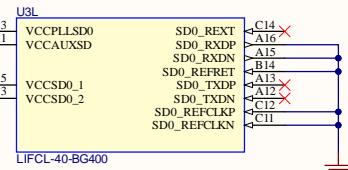
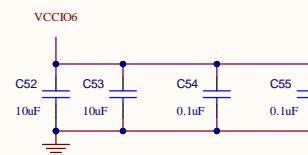
A



Bank6

1.8v

LIFCL-40-BG400

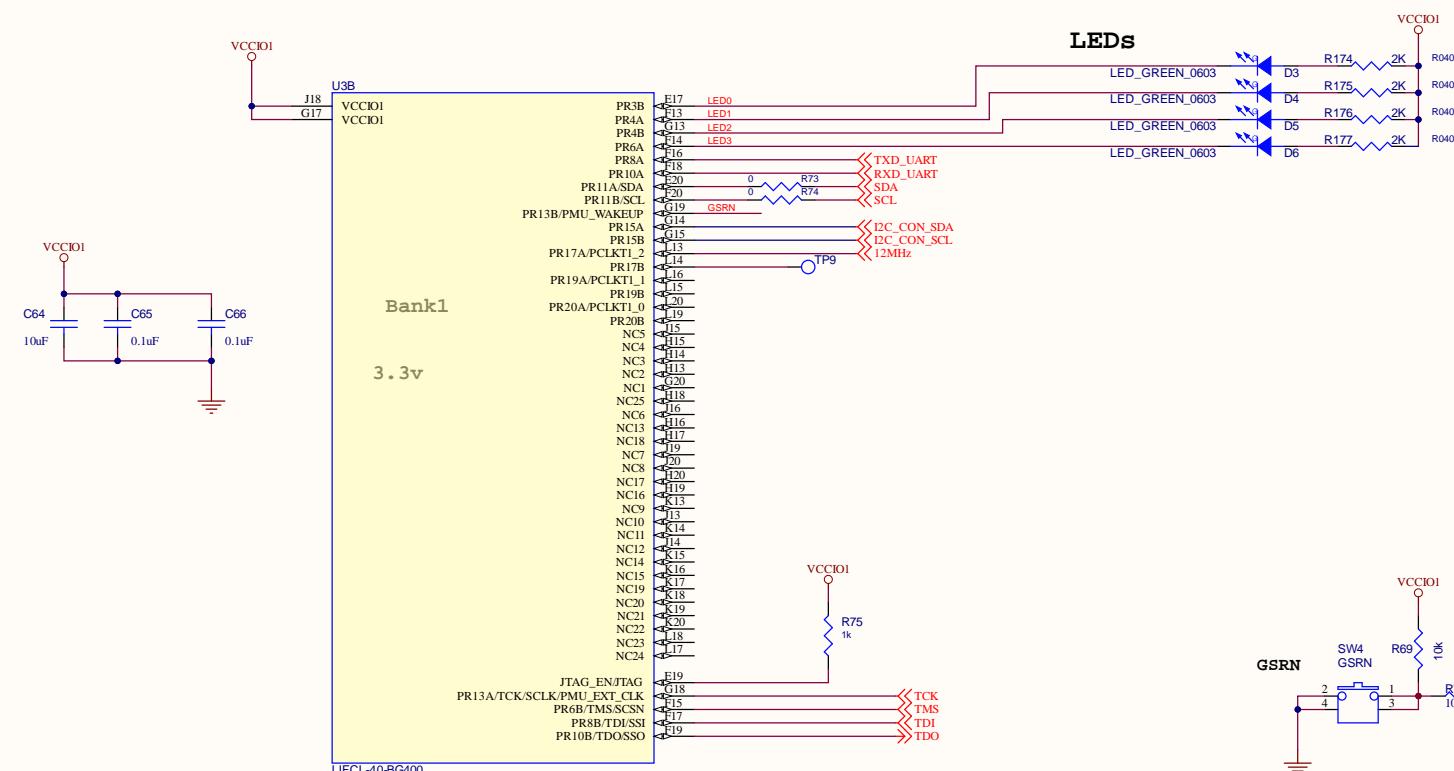


Route SMA pairs as 100 ohm differential

## Proje/Project: Bank 2-6-7

Sayfa Adı/Document Name: 08-Bank2\_6\_7.SchDoc

	Çizilme Tarihi/Drawing Date * 1/24/2026	Tasarlayan/Designed By Umit KAYACIK	Sayfa/Sheet: * of *
	Son Güncelleme/Last Edit Date * 1/24/2026	Kontrol eden/Checked By Boyu/Size: A3	Revision: *
		Dil/Language: ENG	Varyant/Variant: * [No Variations]
		Onaylayan/Approved By *	

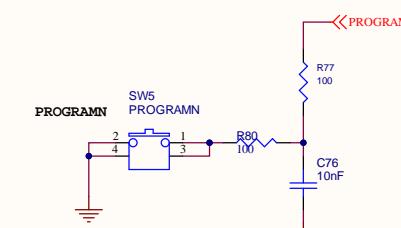
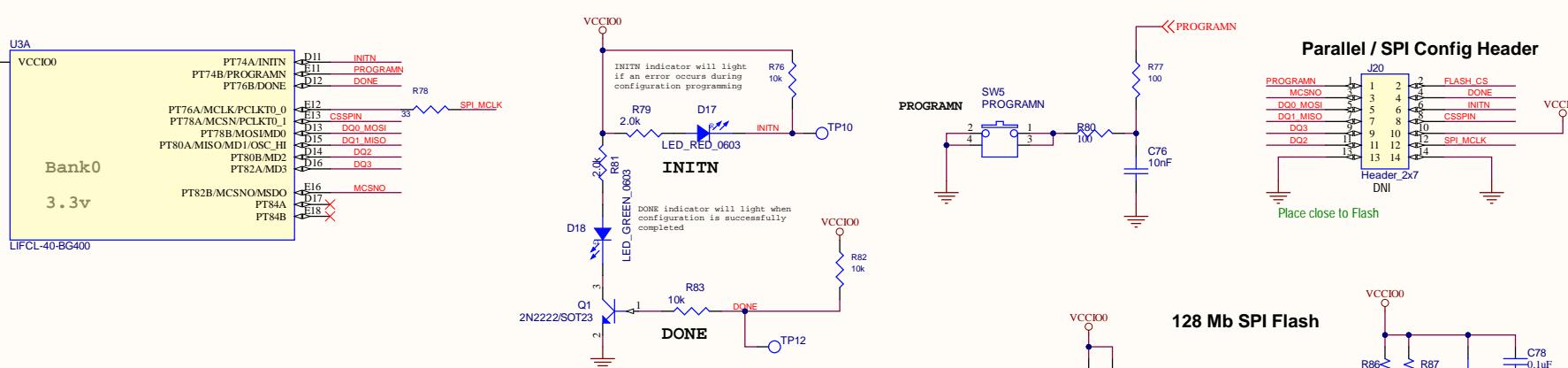
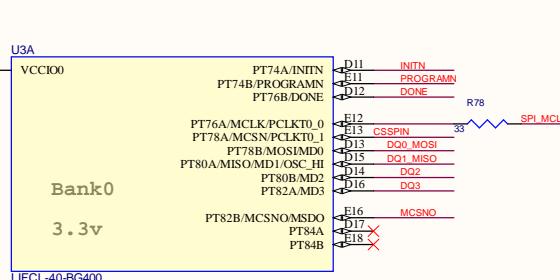
**Proje/Project: I2C LEDs And Push Buttons**

Sayfa Adı/Document Name: 09-I2C\_LEDs And Push Button.SchDoc

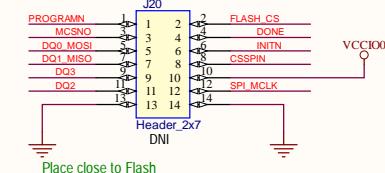
	Çizilme Tarihi/Drawing Date Son Güncelleme/Last Edit Date 1/24/2026	Tasarlayan/Designed By Kontrol eden/Checked By Onaylayan/Approved By Boyuť/Size: A3 Dil/Language: ENG	Sayfa/Sheet: * of * Revision: * Variant/Variant: [No Variations]

1 2 3 4 5 6 7 8

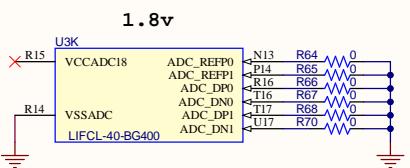
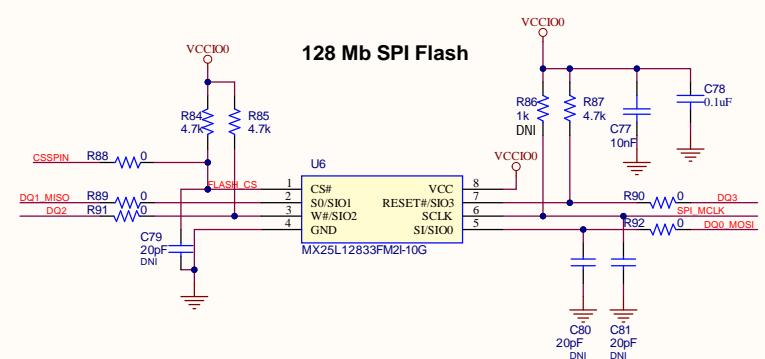
A



### Parallel / SPI Config Header



### 128 Mb SPI Flash



Keep noisy signals away from ADC circuit

### Proj/Project: Configuration and ADC

Sayfa Adı/Document Name: 10 - Configuration And ADC.SchDoc

	Çizilme Tarihi/Drawing Date * 1/24/2026	Tasarlayan/Designed By * Ümit KAYACIK	Sayfa/Sheet: * of *
	Son Güncelleme/Last Edit Date * 1/24/2026	Kontrol eden/Checked By * Dil/Language: ENG	Revison: *
		Onaylayan/Approved By * Dil/Language: ENG	Varyant/Variant: [No Variations]

1

2

3

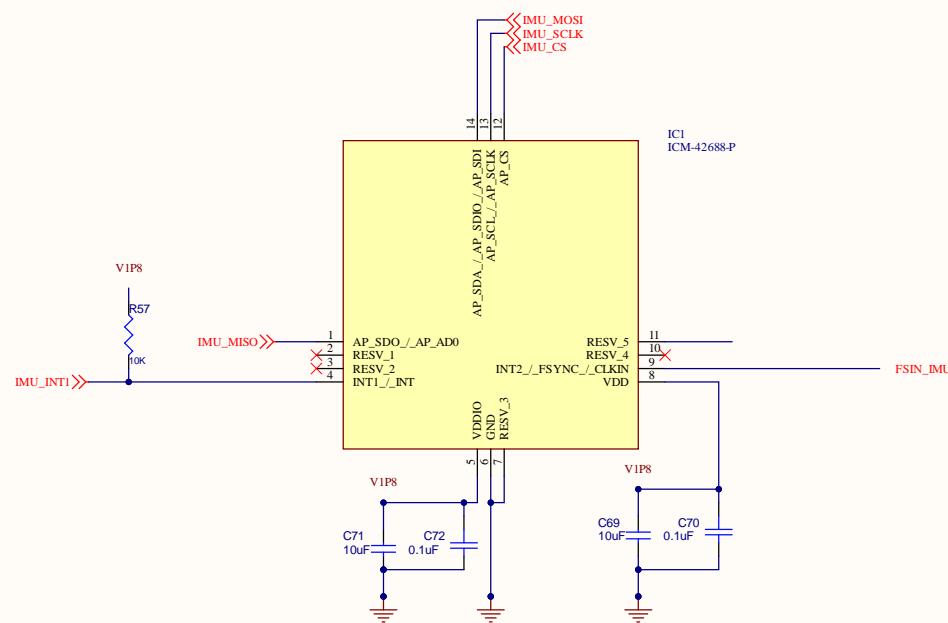
4

5

6

7

8



<b>Proje/Project: IMU</b>			
Sayfa Adı/Document Name: 11-IMU.SchDoc			
	Çizimle Tarihi/Drawing Date * Son Güncelleme/Last Edit Date 1/23/2026	Tasarlayan/Designed By <b>Umit KAYACIK</b> Kontrol eden/Checked By *	Sayfa/Sheet: * of * Revision: * Boyut/Size: <b>A3</b> Dil/Language: <b>ENG</b>
		Onaylayan/Approved By * Varyant/Variant: [No Variations]	

A

A

B

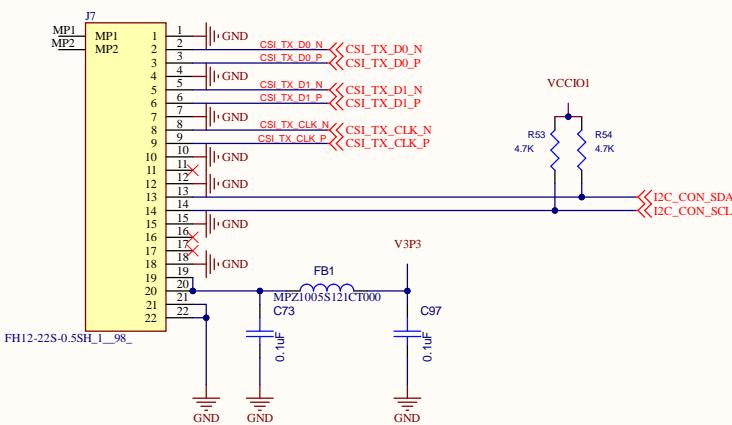
B

C

C

D

D



<b>Proje/Project: JETSON-CON</b>			
Sayfa Adı/Document Name: 12 - JETSON_CON.SchDoc			
	Cizimle Tarihi/Drawing Date * <b>1/24/2026</b>	Tasarlayan/Designed By <b>Umit KAYACIK</b>	Sayfa/Sheet: * of * Revision: *
	Son Güncelleme/Last Edit Date * <b>1/24/2026</b>	Kontrol eden/Checked By * <b>Buyut/Size: A3 Dil/Language: ENG</b>	Onaylayan/Approved By * <b>Varyant/Variant: [No Variations]</b>