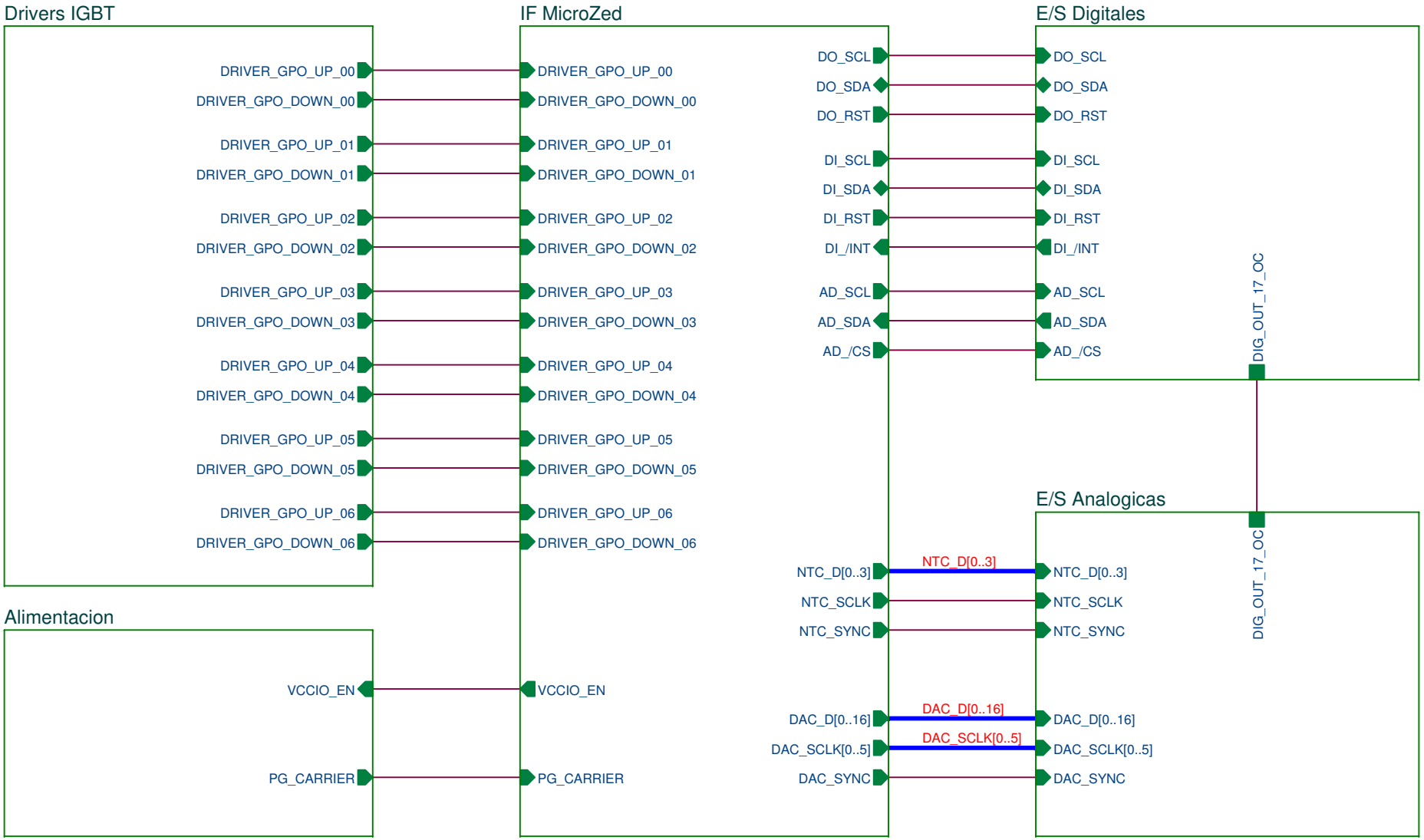
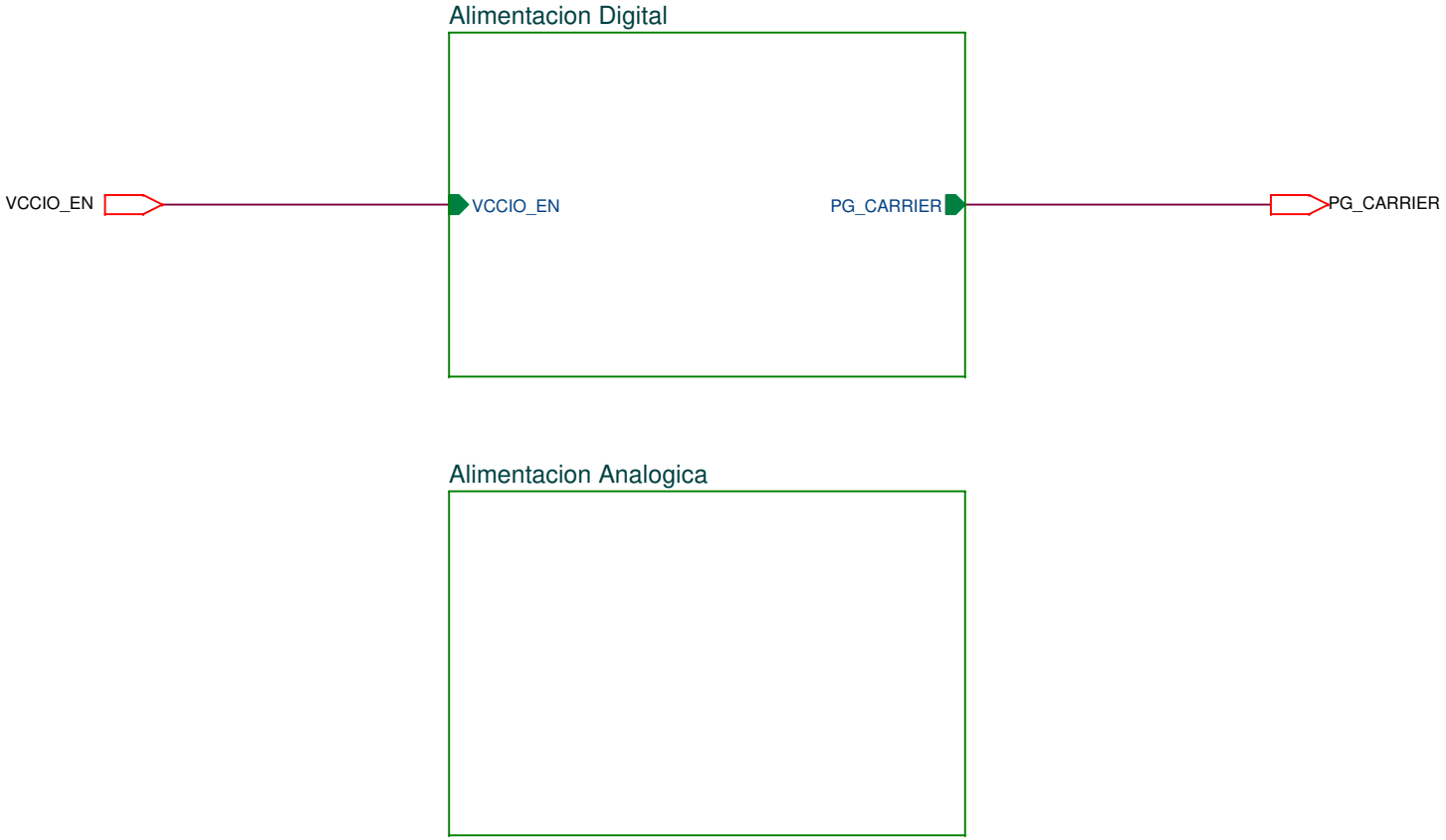
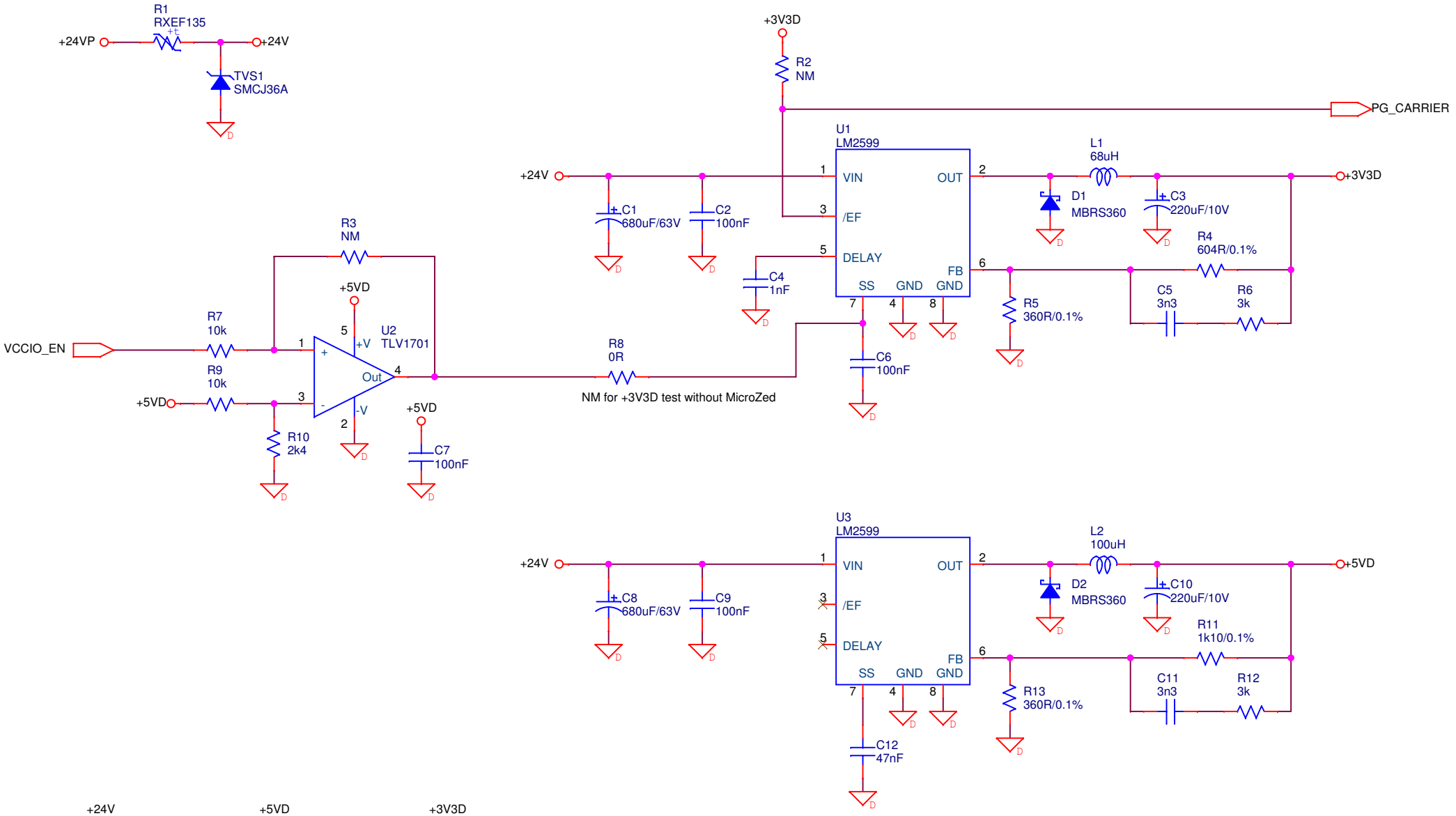


ECPs

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed Bloques B0		
Size A4	CODIGO OT OT-2017-4302	Modified Thursday, February 15, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 1 of 41



uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B1 Alimentacion B1		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 2 of 41



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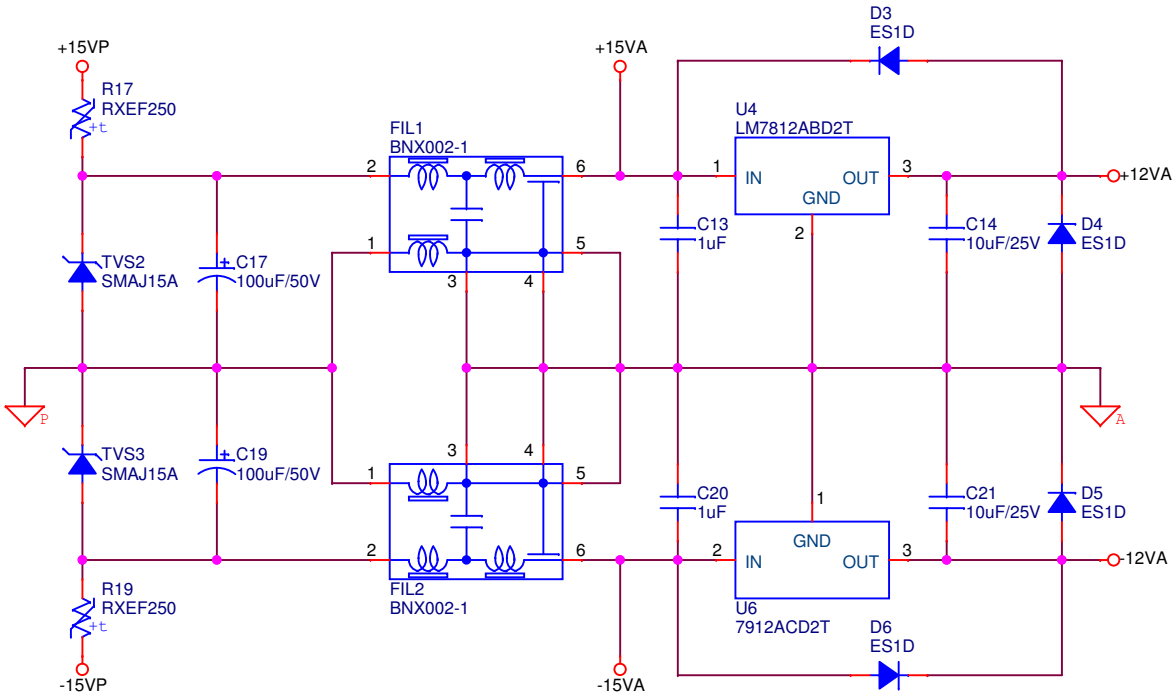
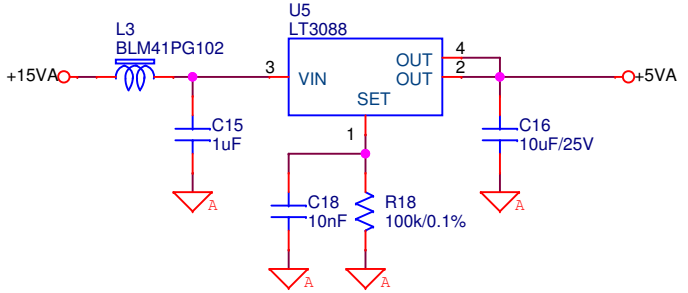
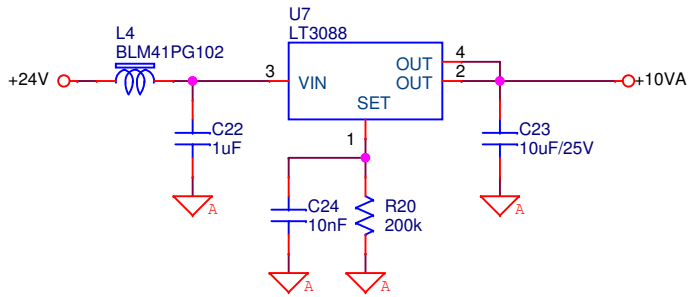
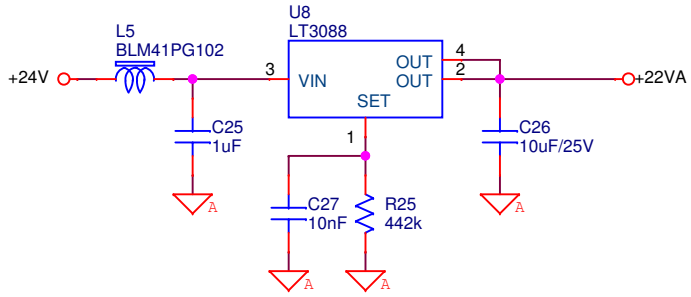
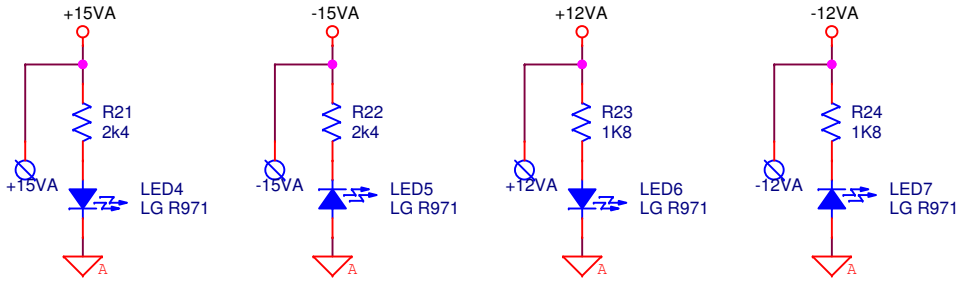
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 3 of 41

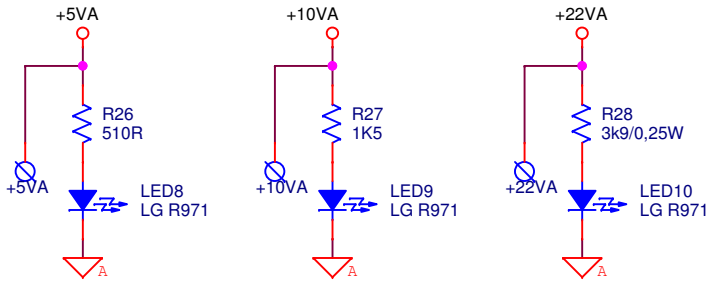












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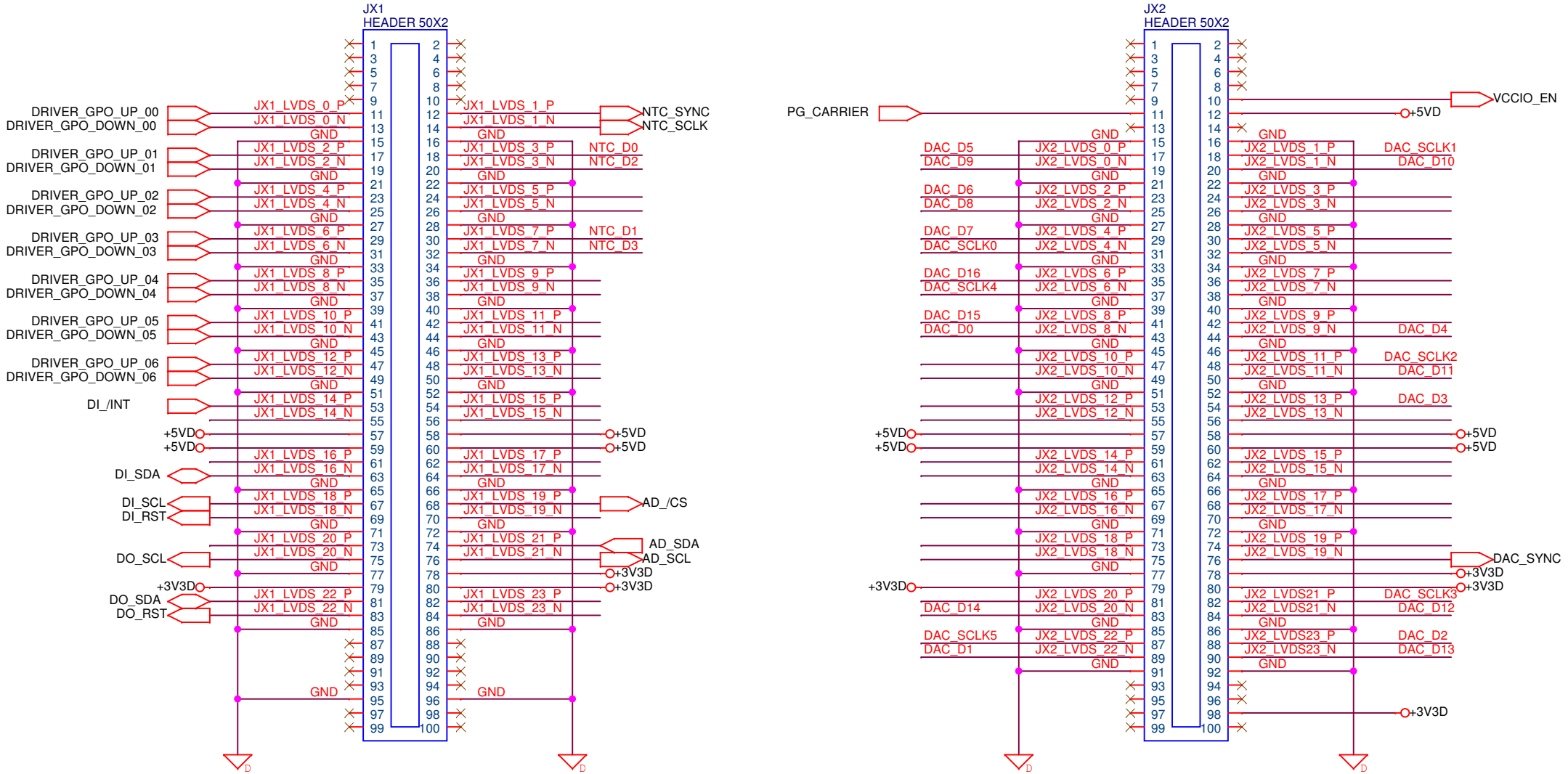
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B1B2 Alimentacion Analogica B1B2		
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 4 of 41



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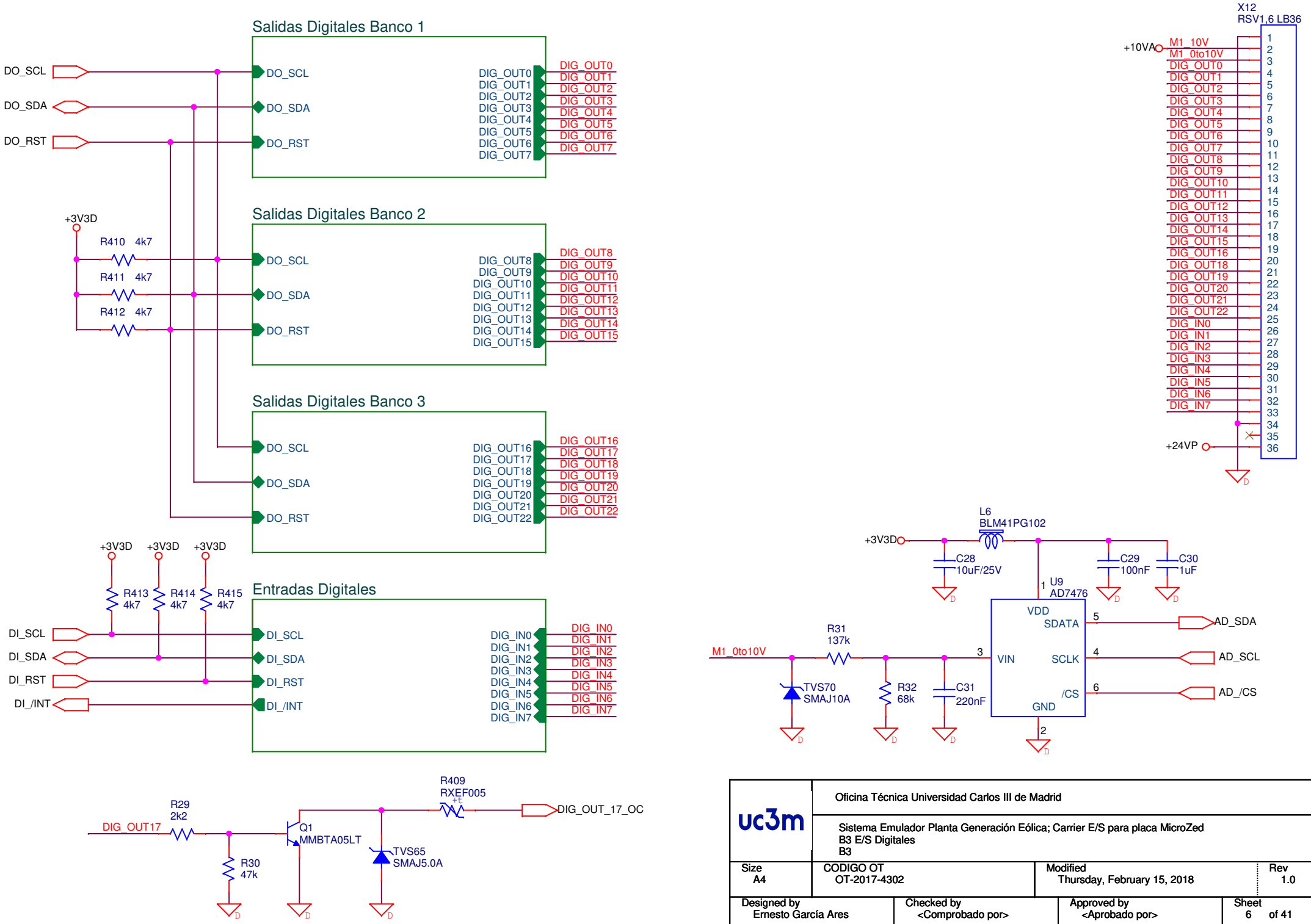
Size A4	CODIGO OT OT-2017-4302	Modified Thursday, February 15, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 5 of 41



uc3m	Oficina Técnica Universidad Carlos III de Madrid		
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Size A4	CODIGO OT OT-2017-4302	Modified Thursday, February 15, 2018	Rev 1.0
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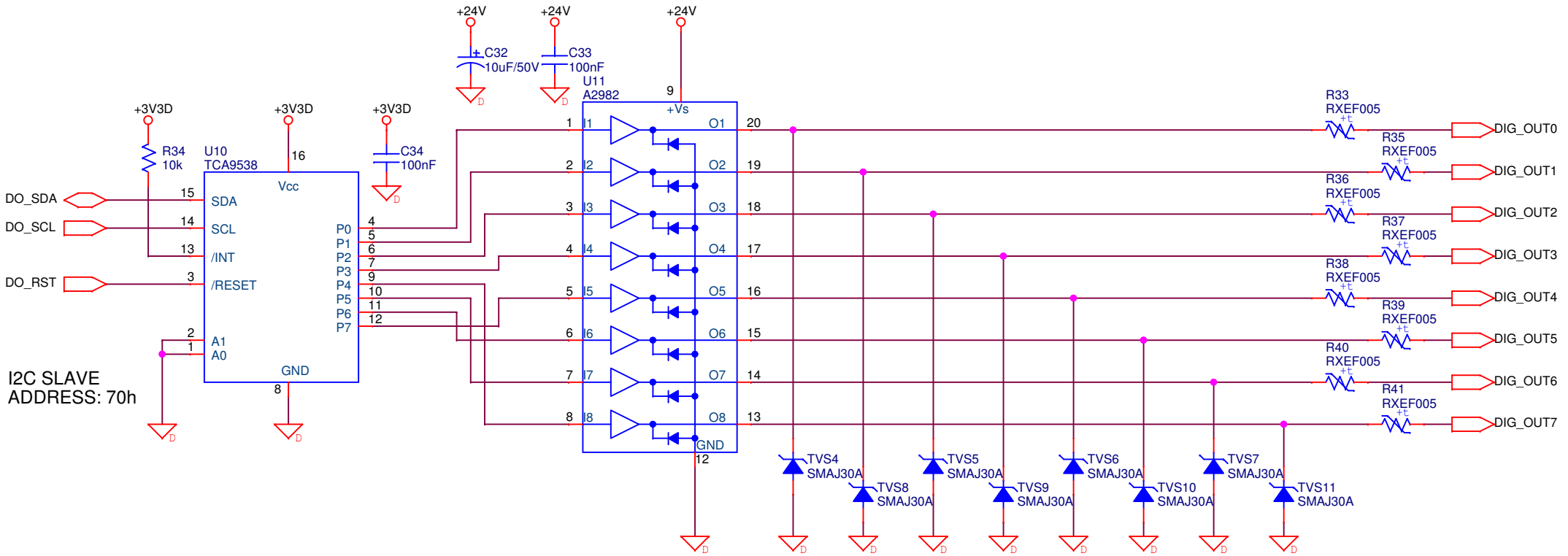

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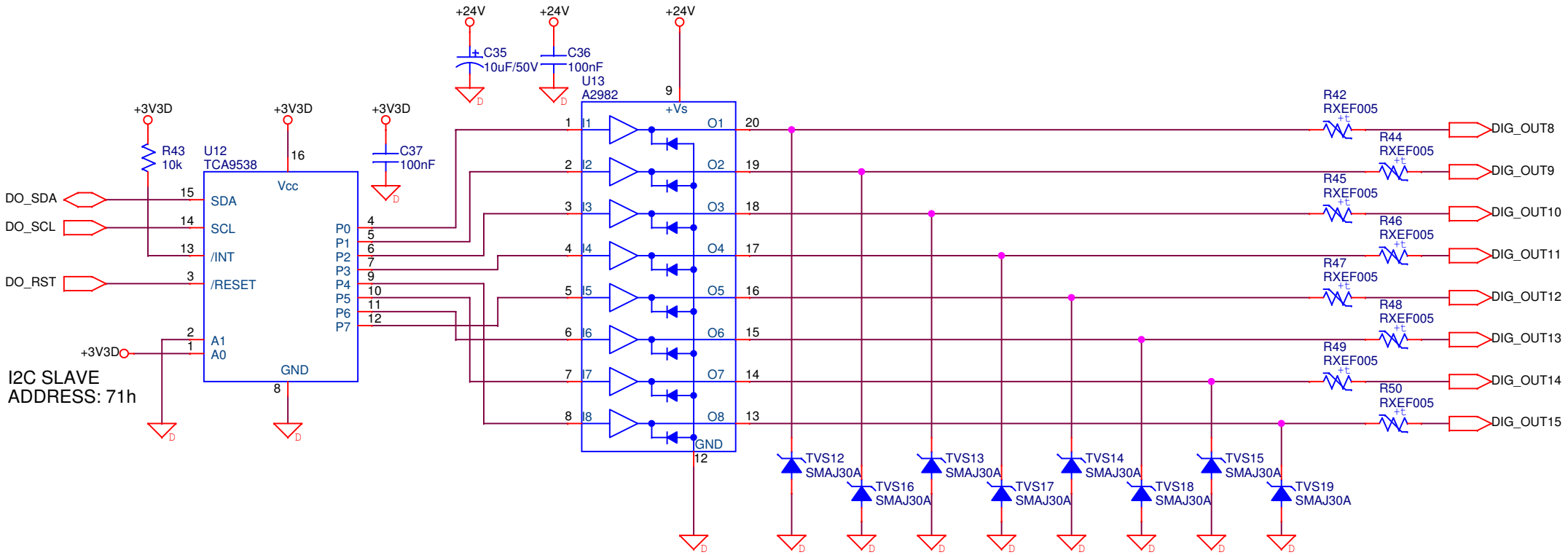
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B3B1 Salidas Digitales Banco 1 B3B1		
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 7 of 41



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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
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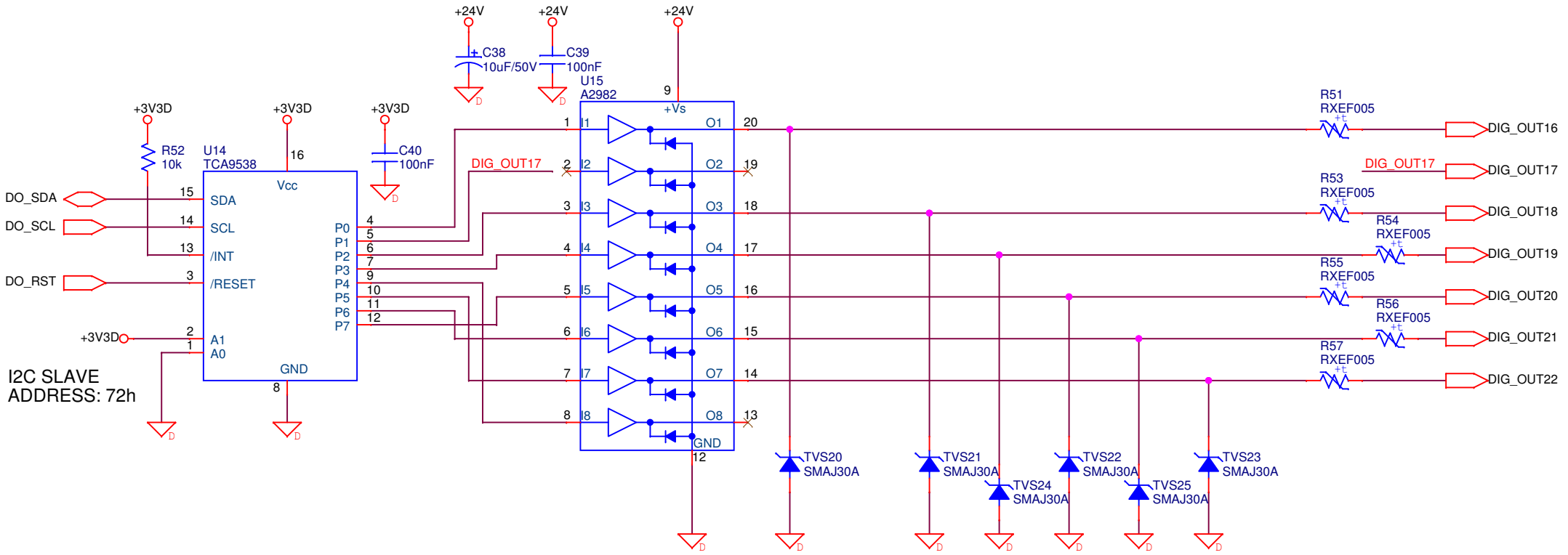

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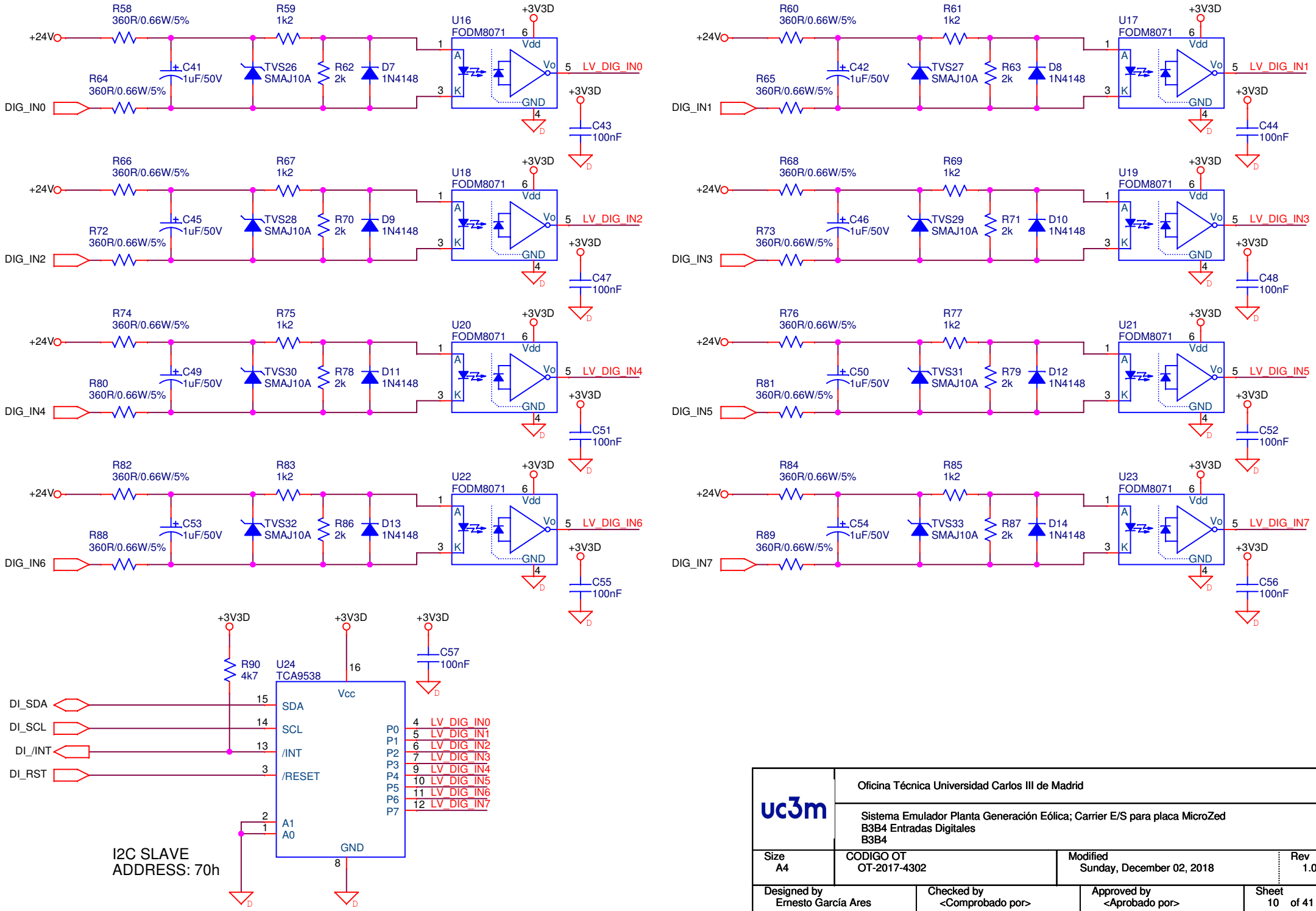
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 9 of 41



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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
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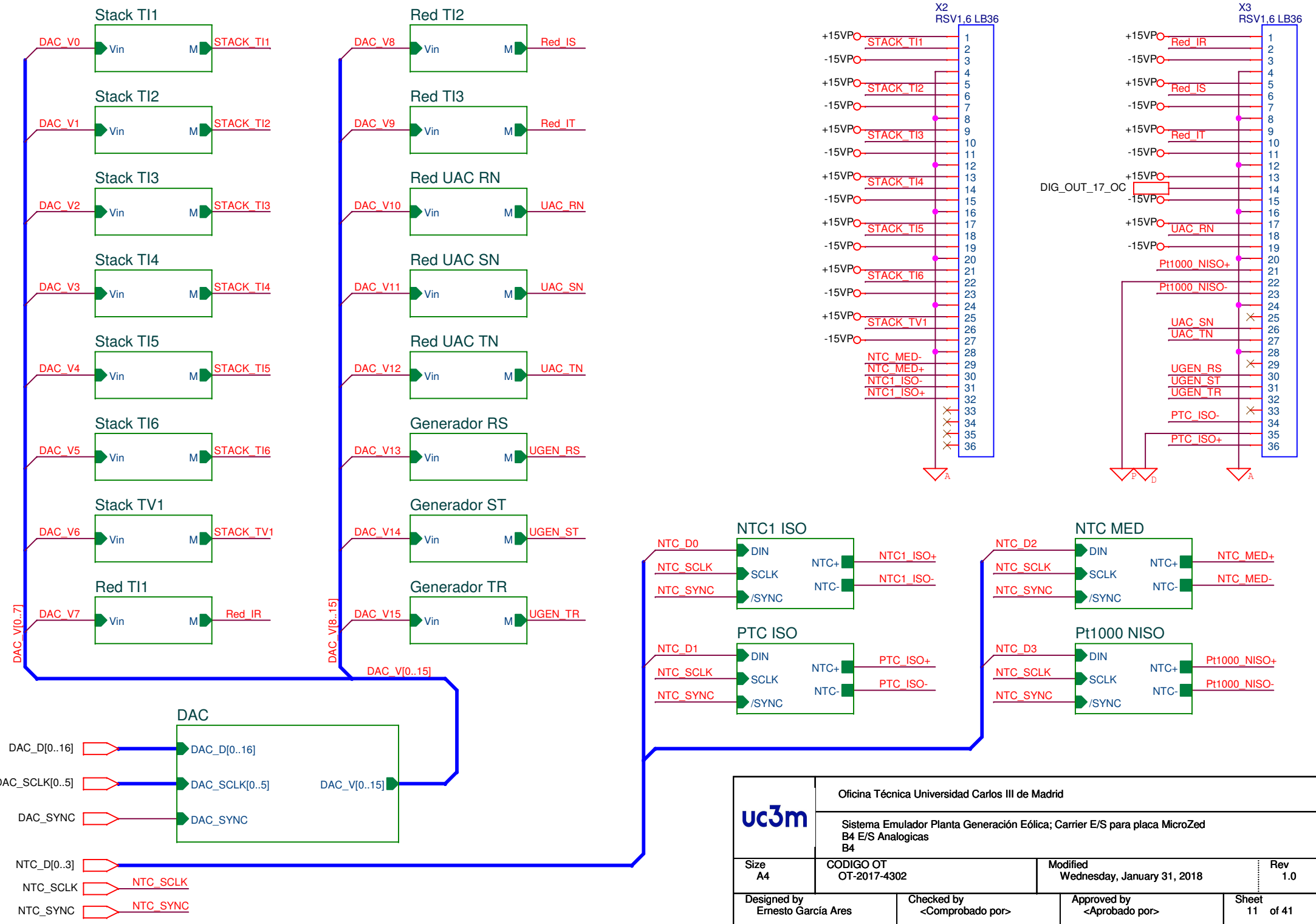

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	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B4 E/S Analogicas B4		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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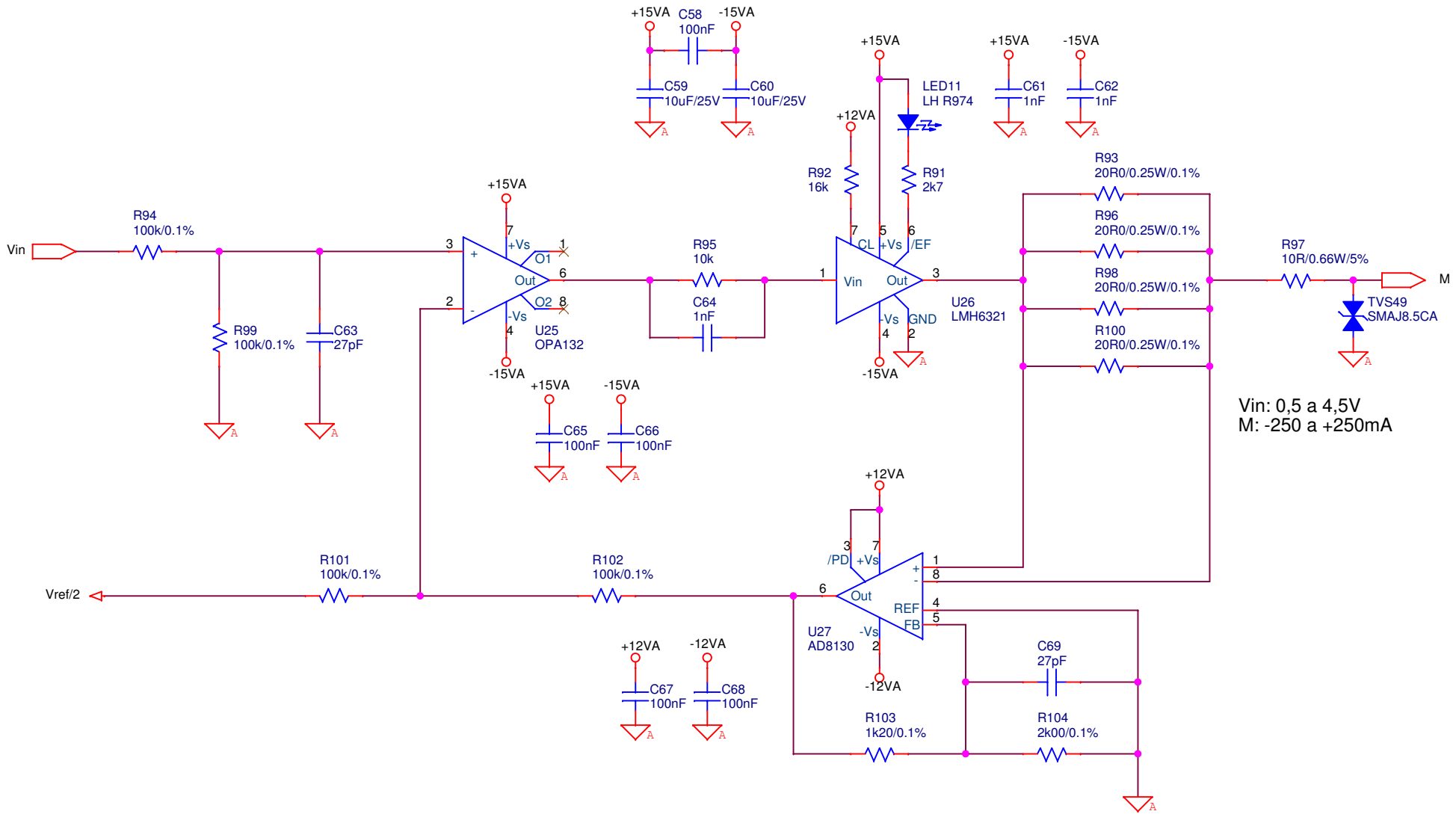

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	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B4B01 Stack TI1 B4B01		
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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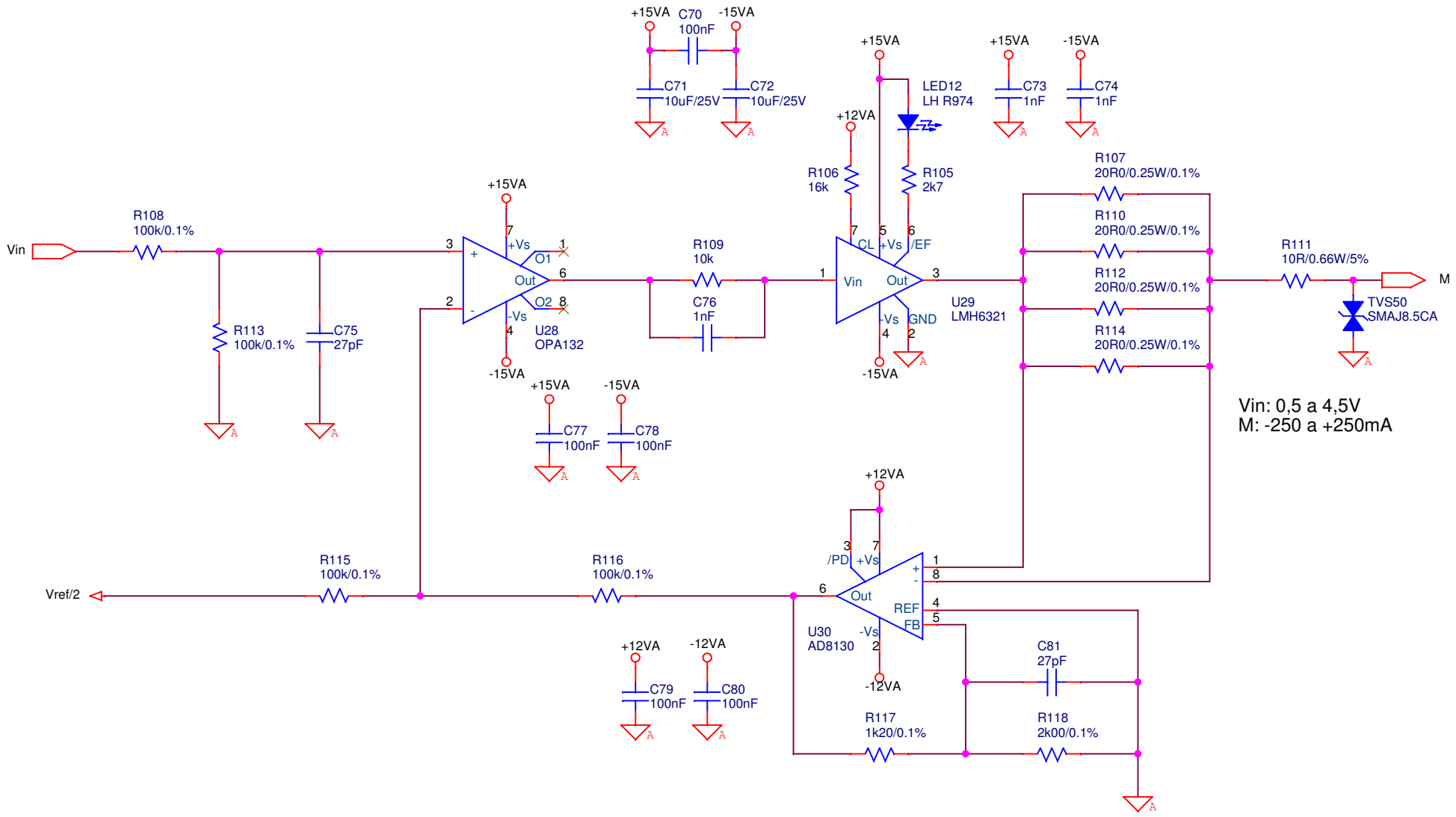

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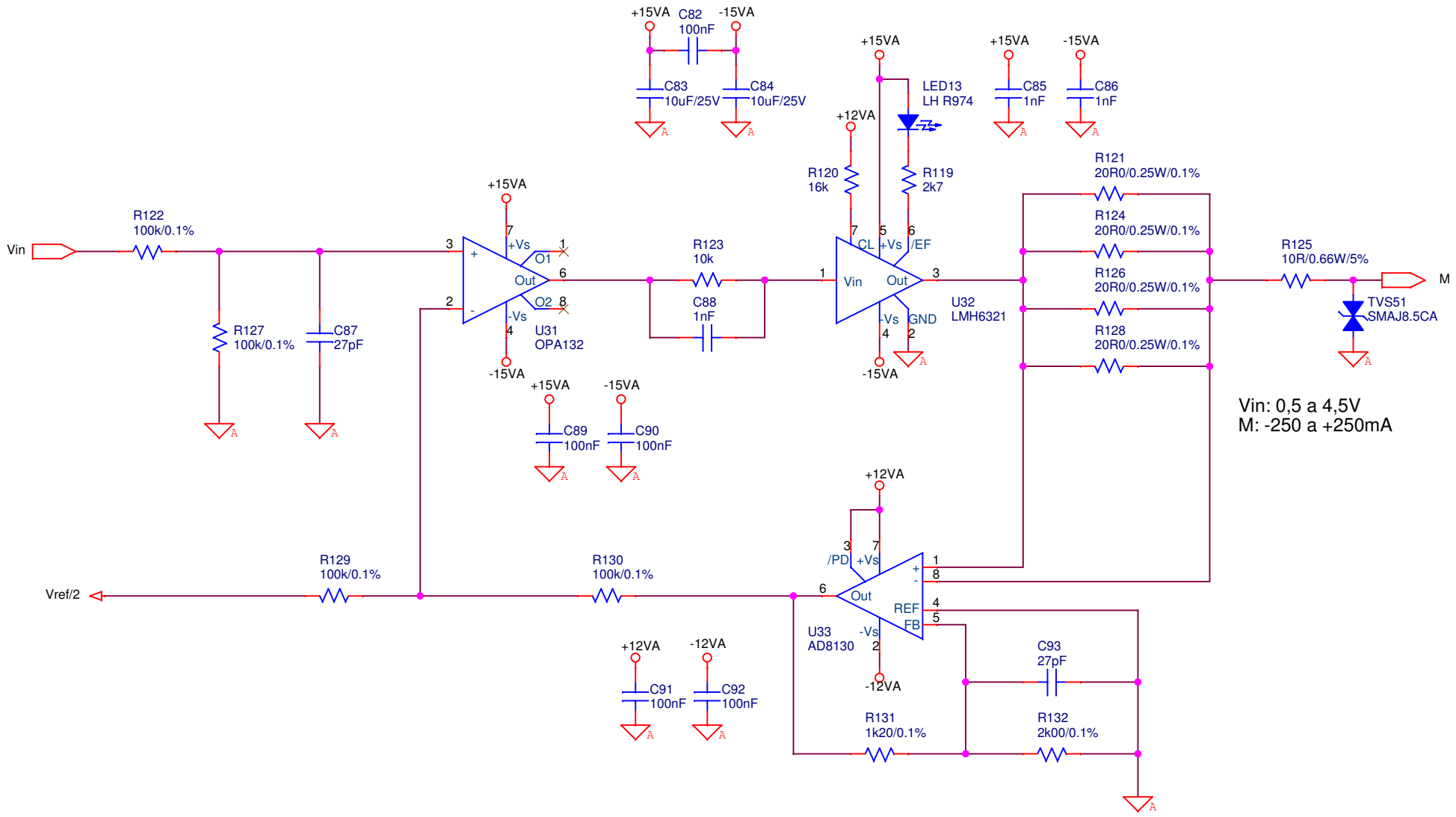
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B4B02 Stack TI2 B4B02		
Size A4	CODIGO OT OT-2017-4302	Modified Monday, February 12, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 13 of 41



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	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B4B03 Stack TI3 B4B03		
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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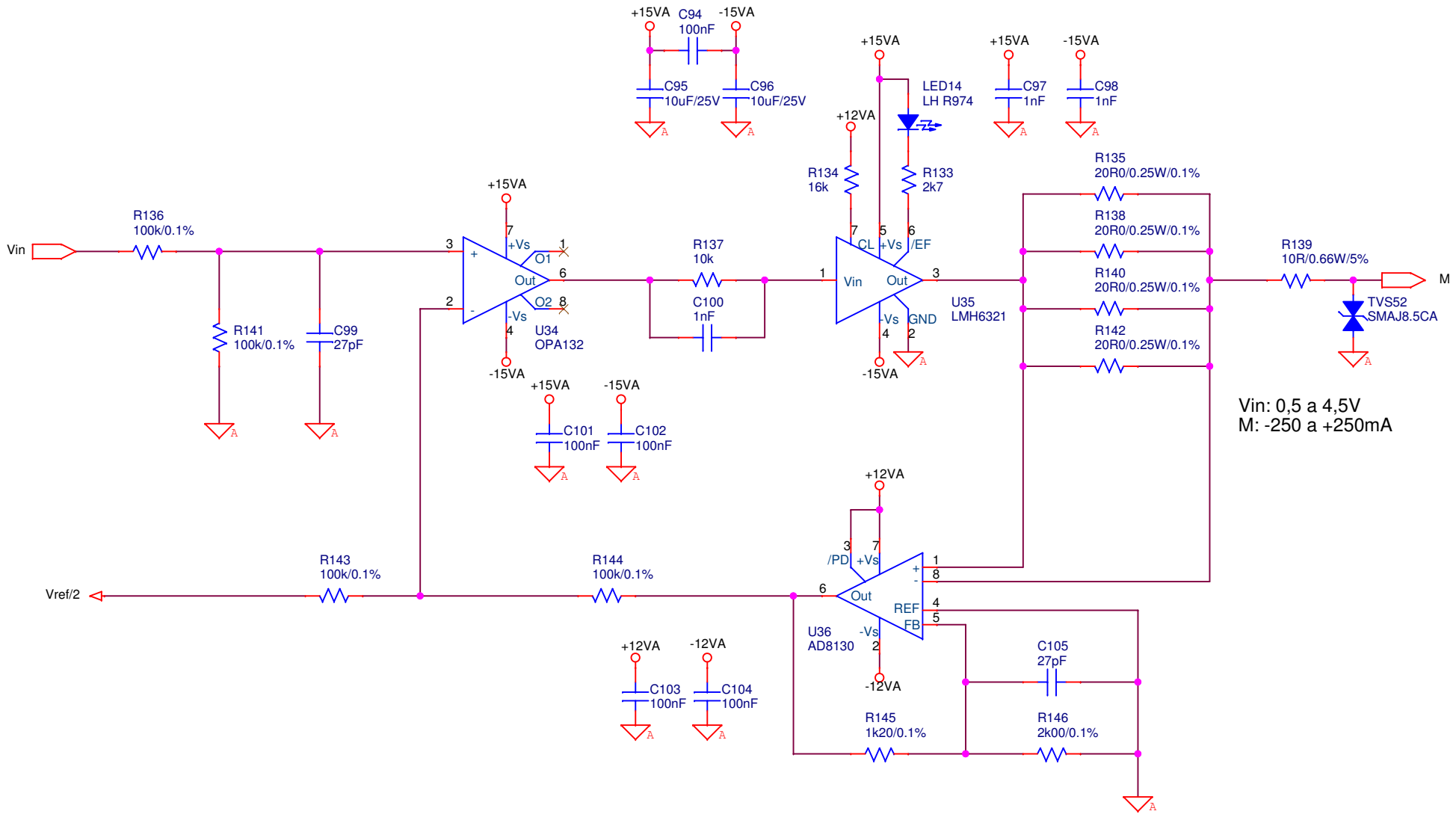

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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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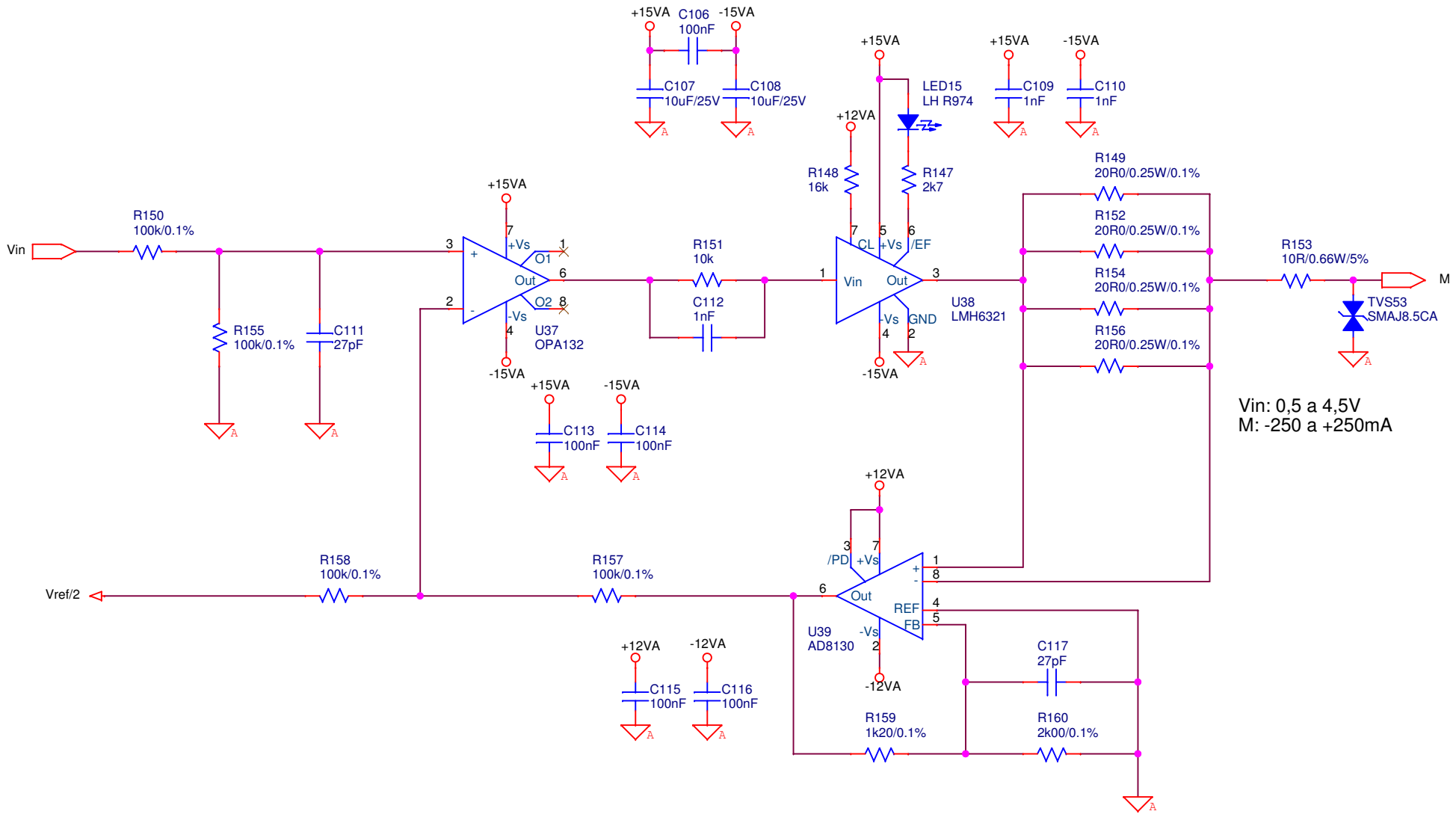

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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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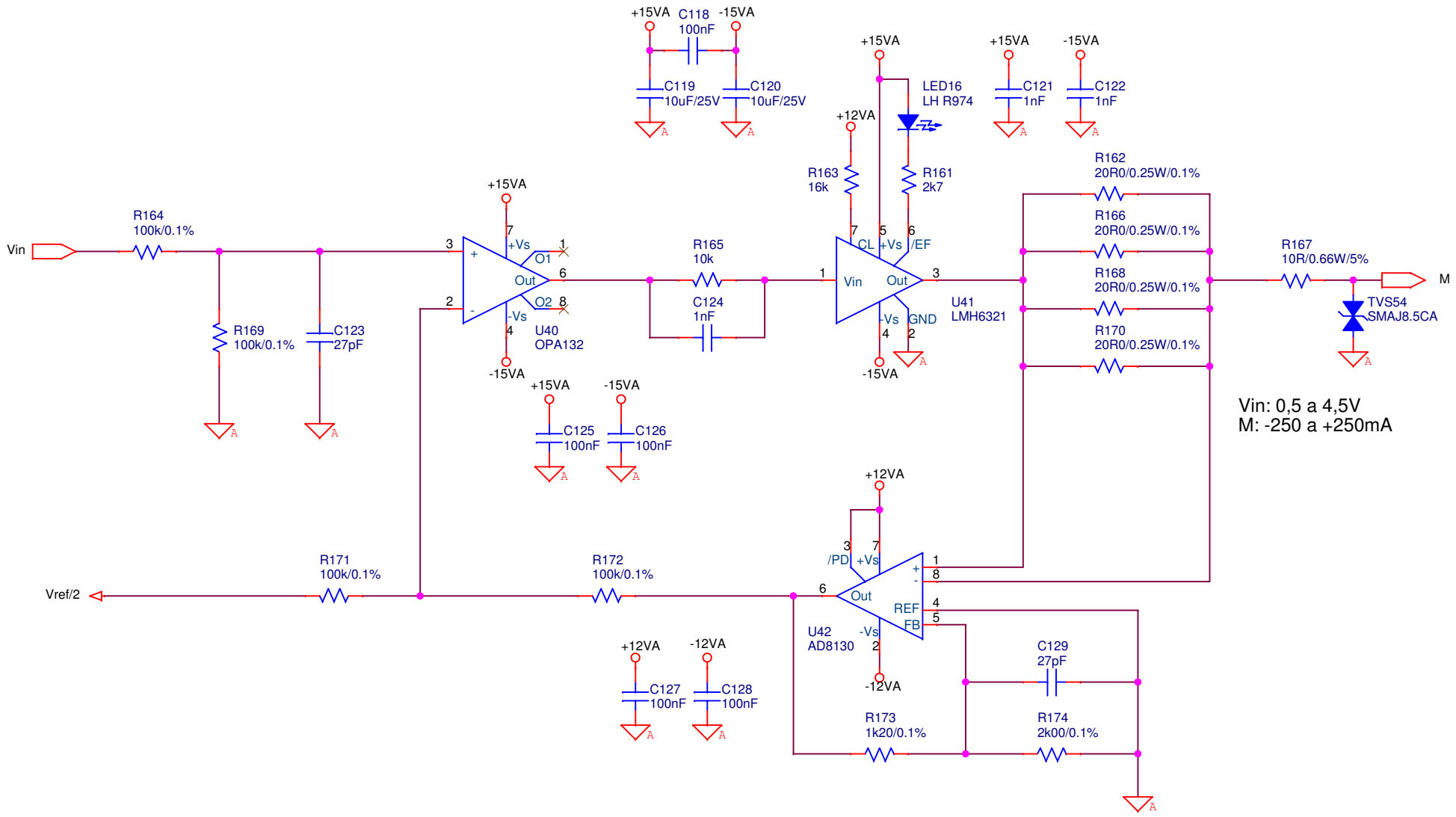

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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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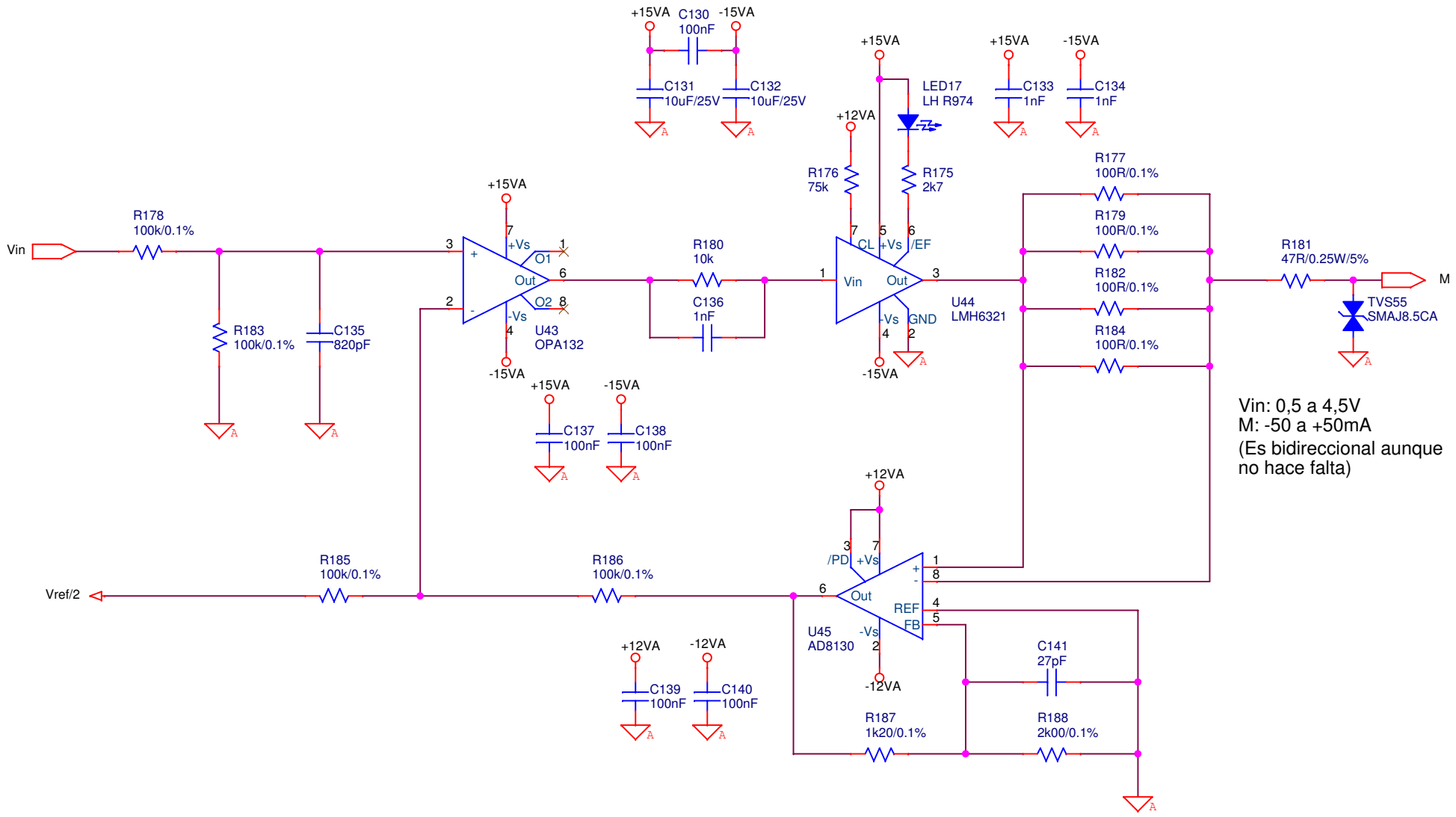

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Size A4	CODIGO OT OT-2017-4302	Modified Monday, February 12, 2018	Rev 1.0
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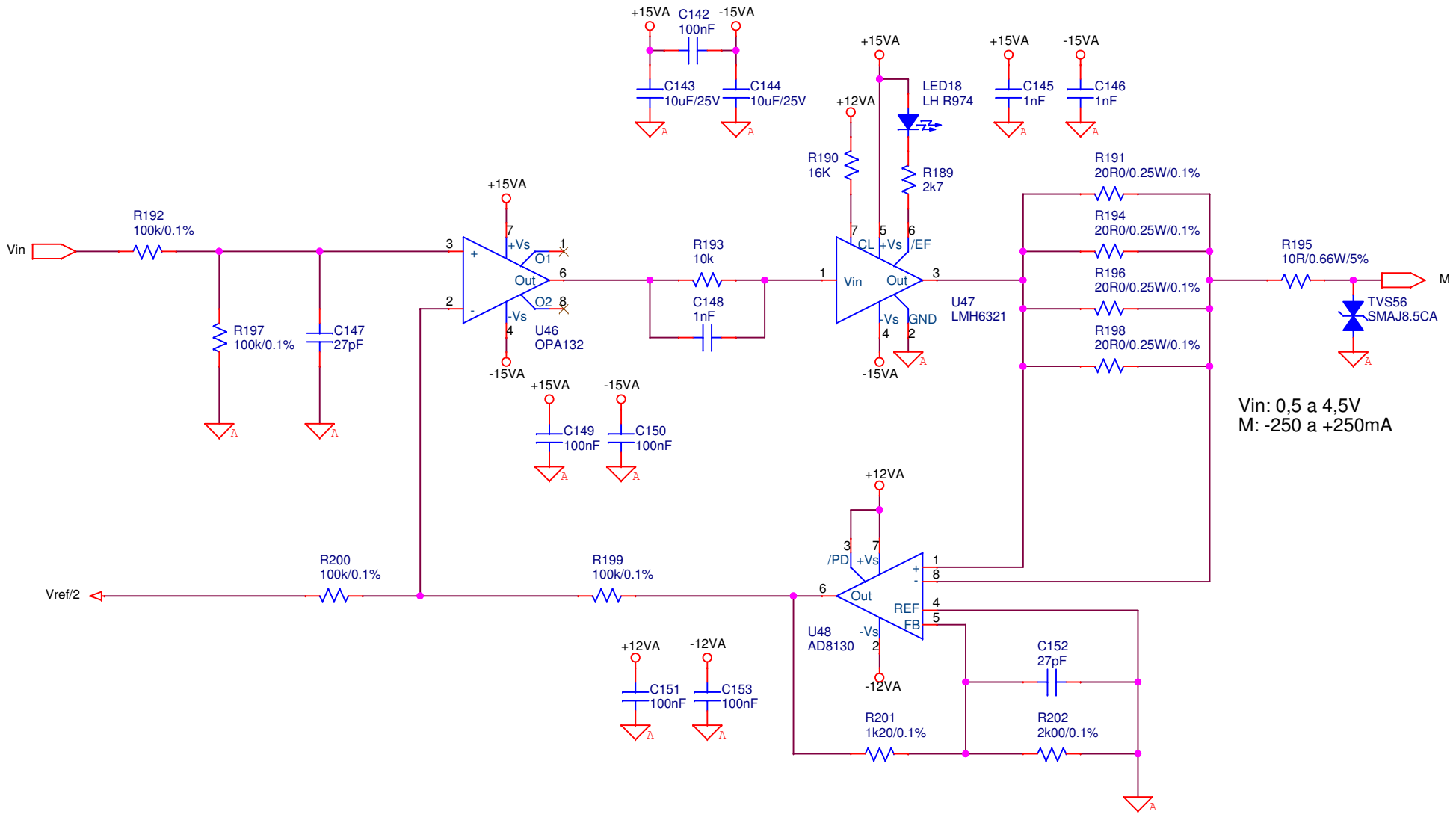

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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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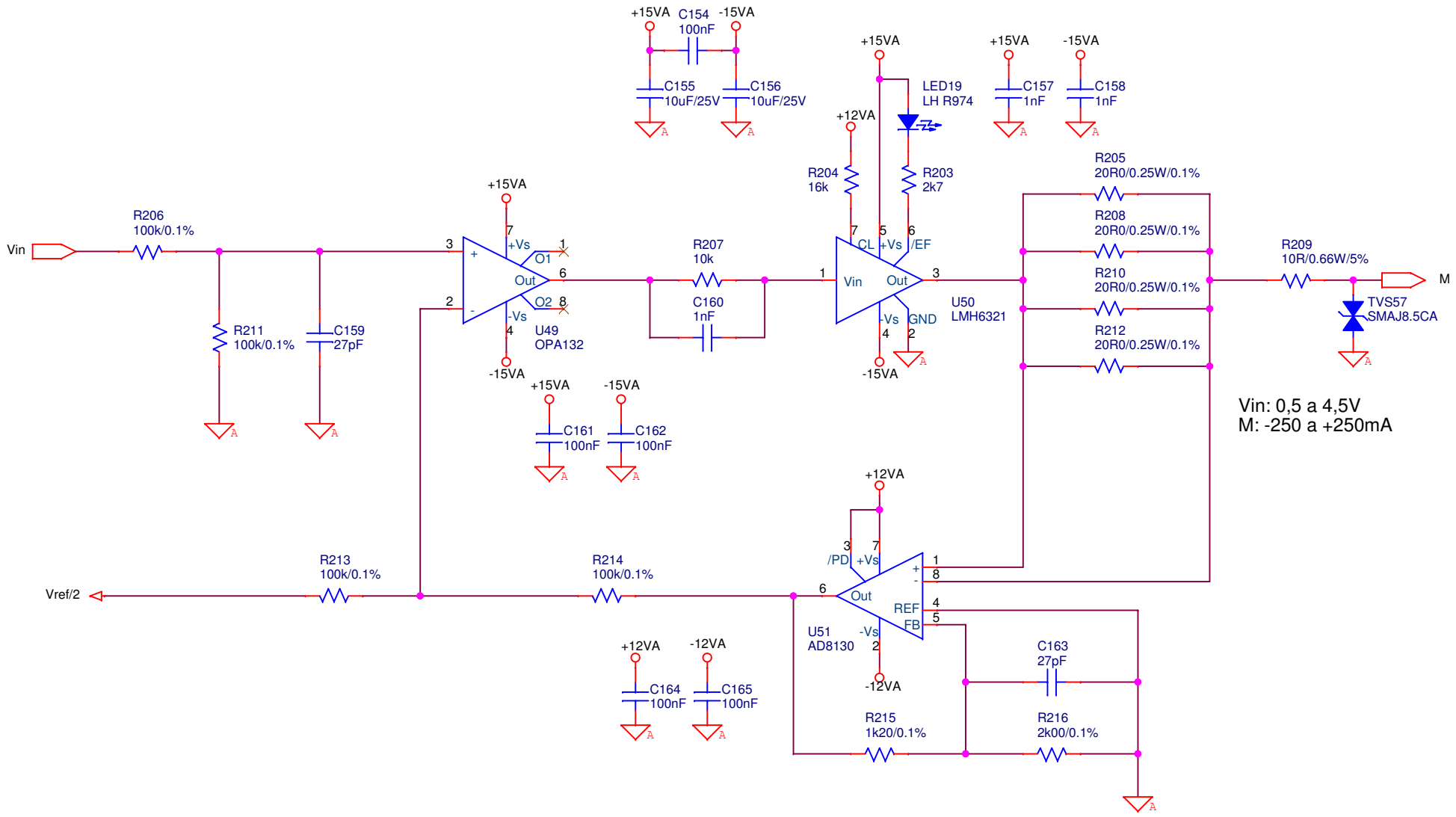

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	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B4B09 Red TI2 B4B09		
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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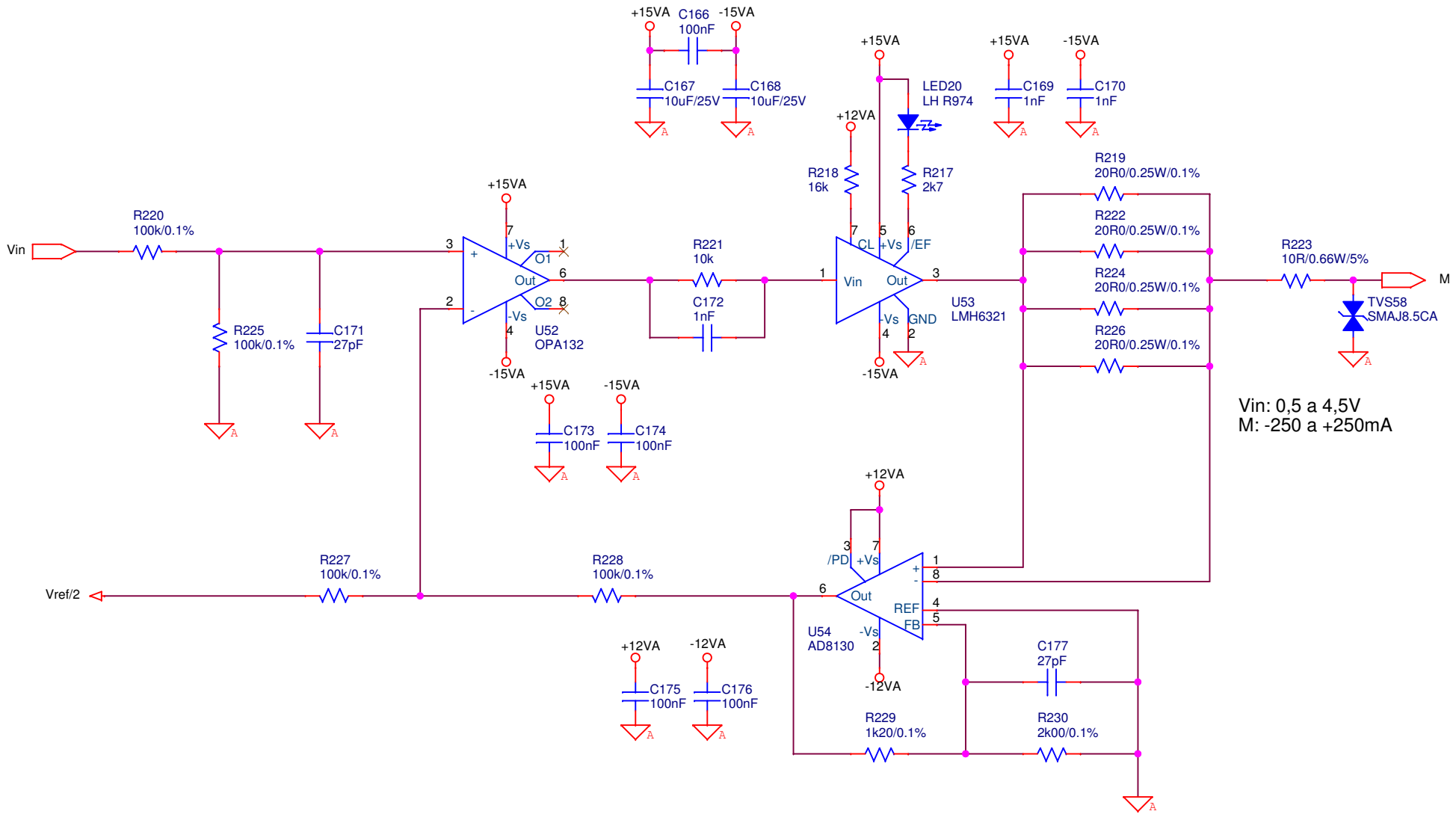

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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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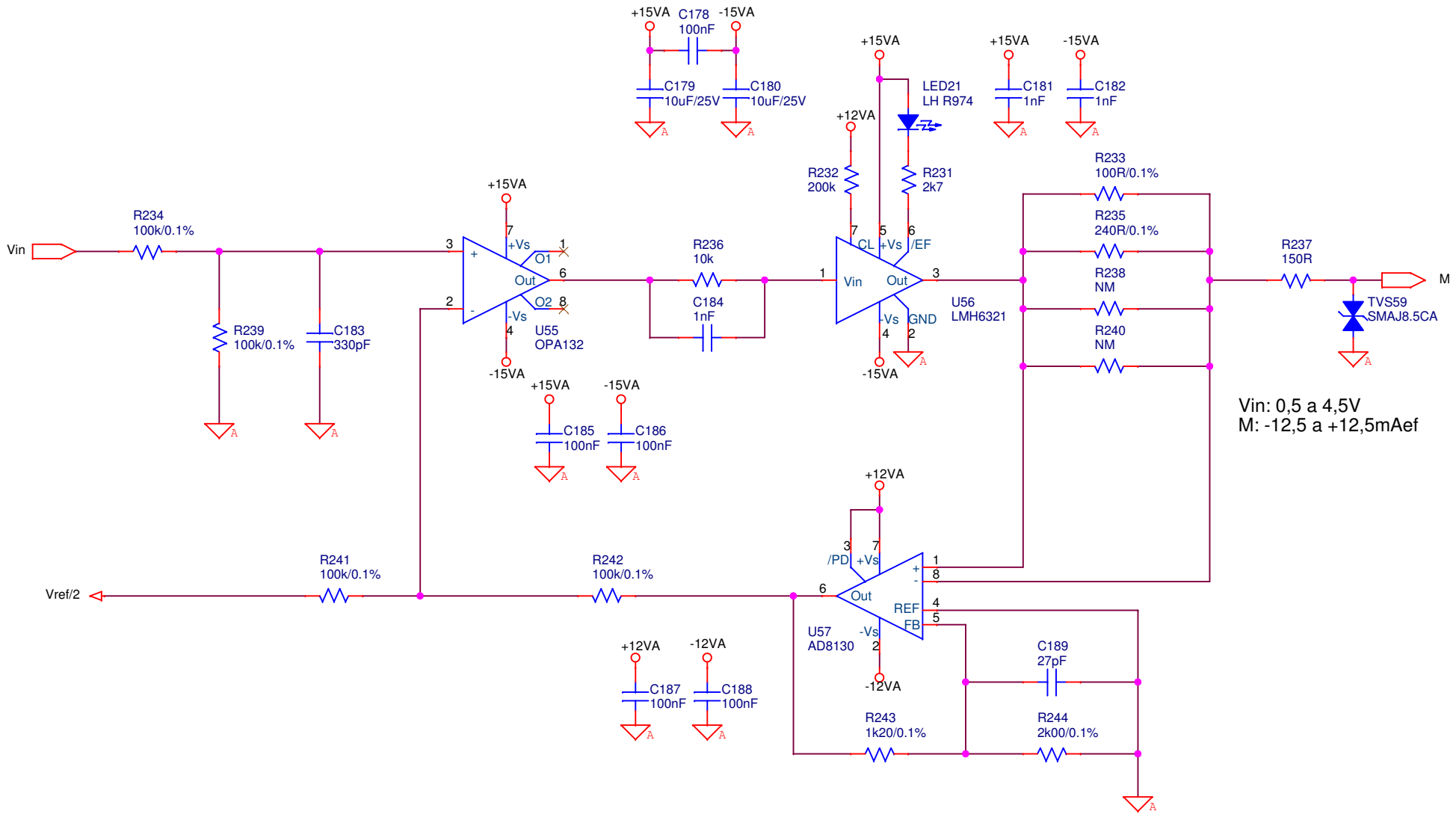

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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
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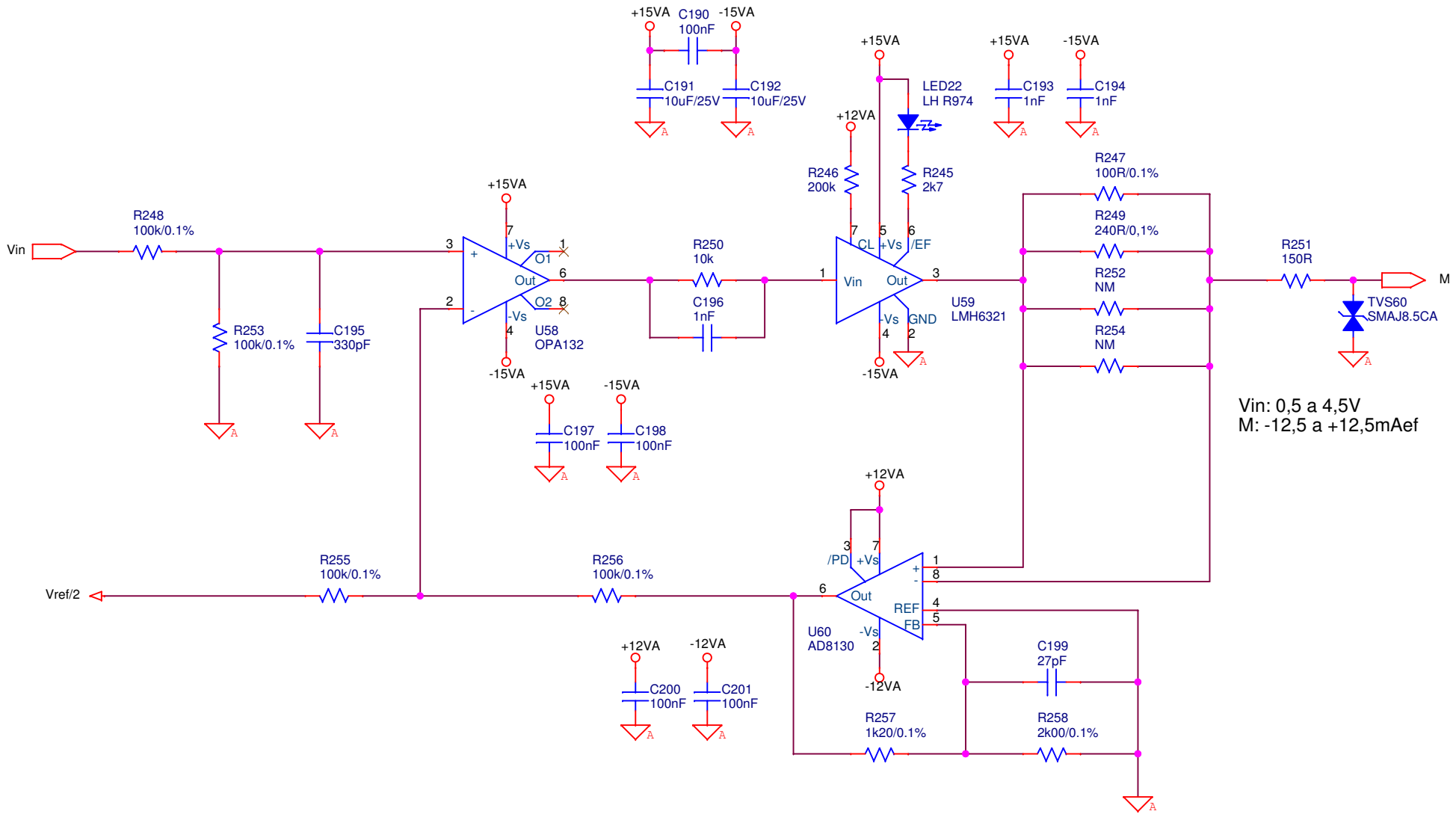

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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
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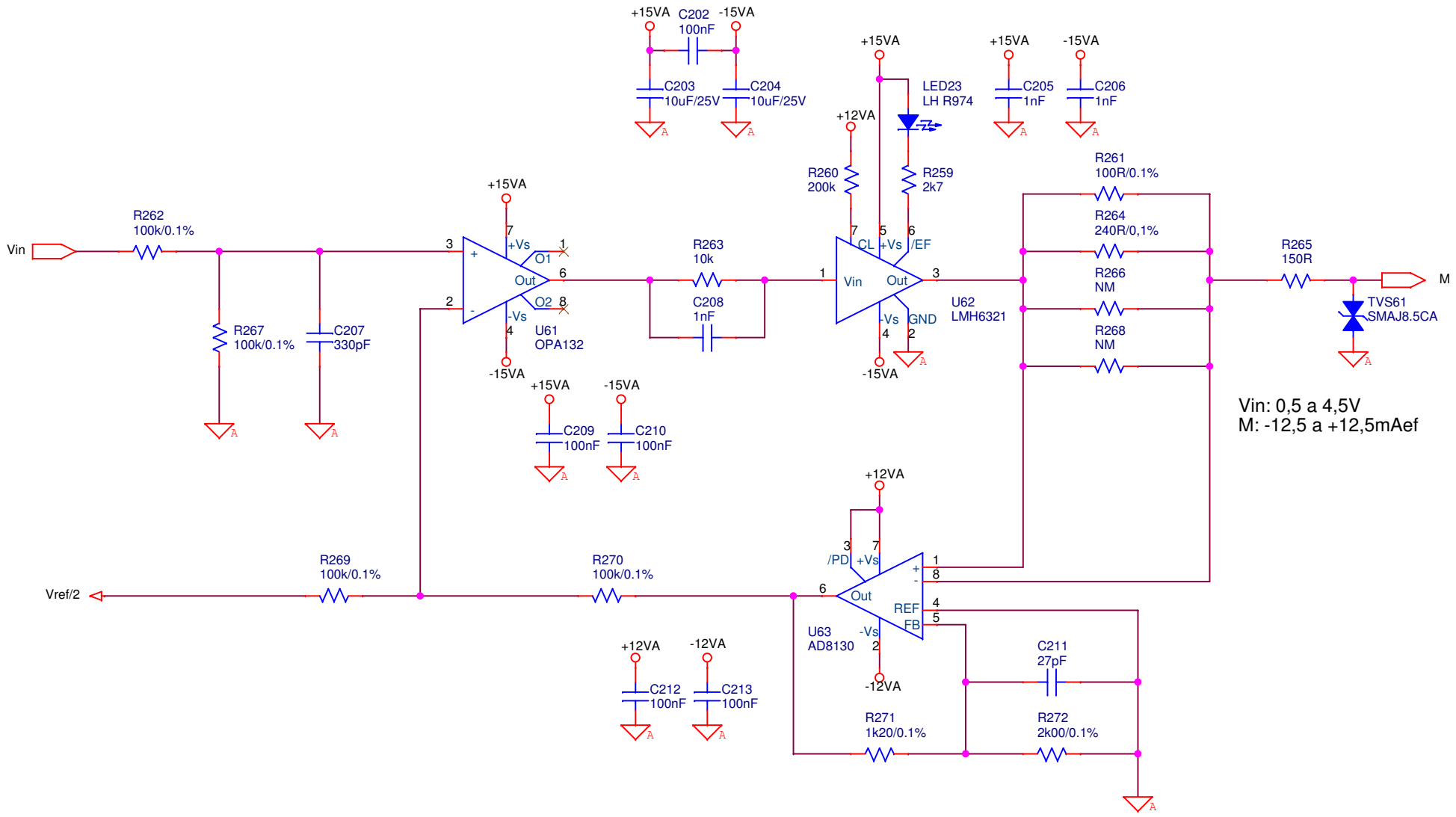

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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
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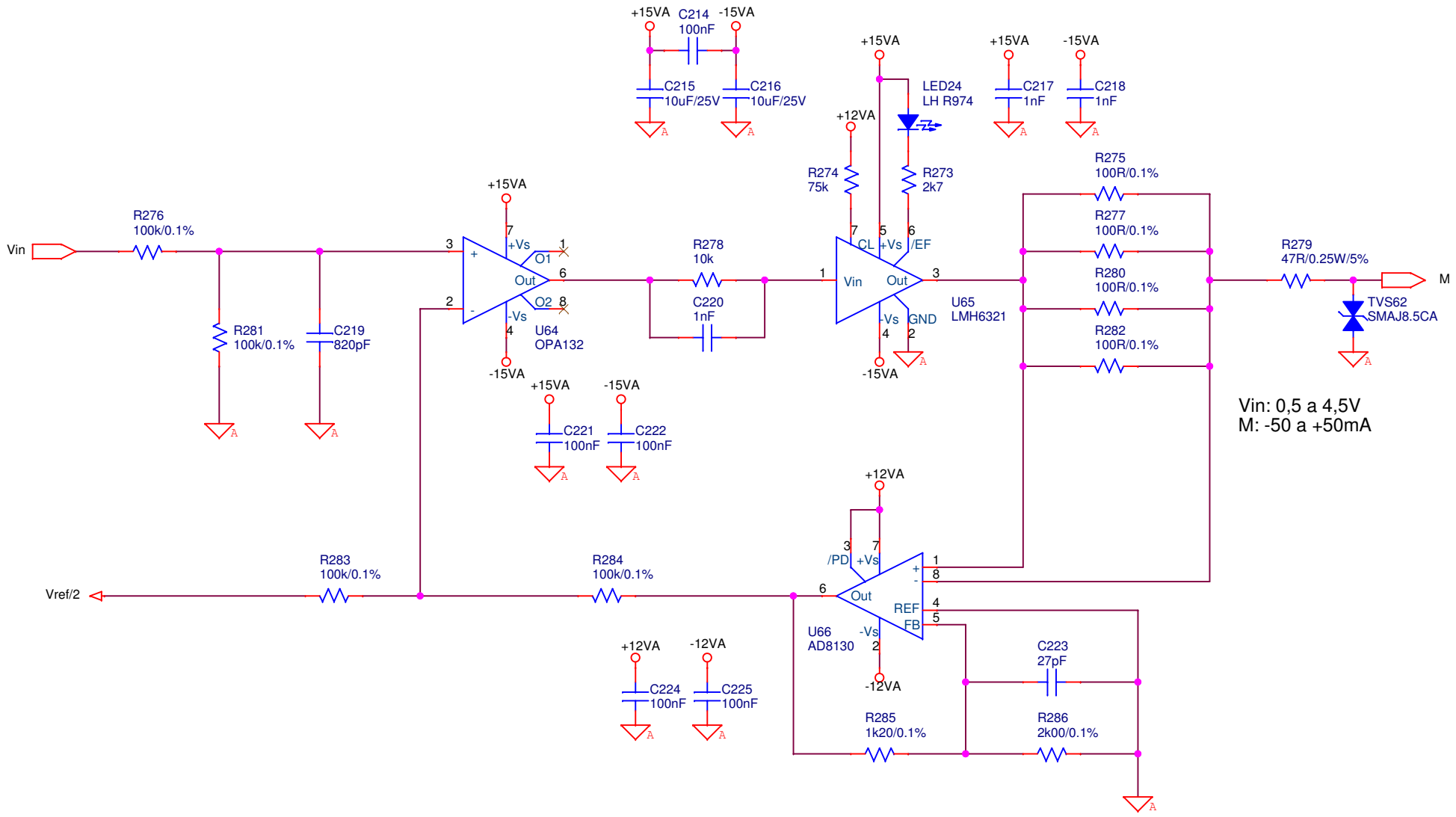

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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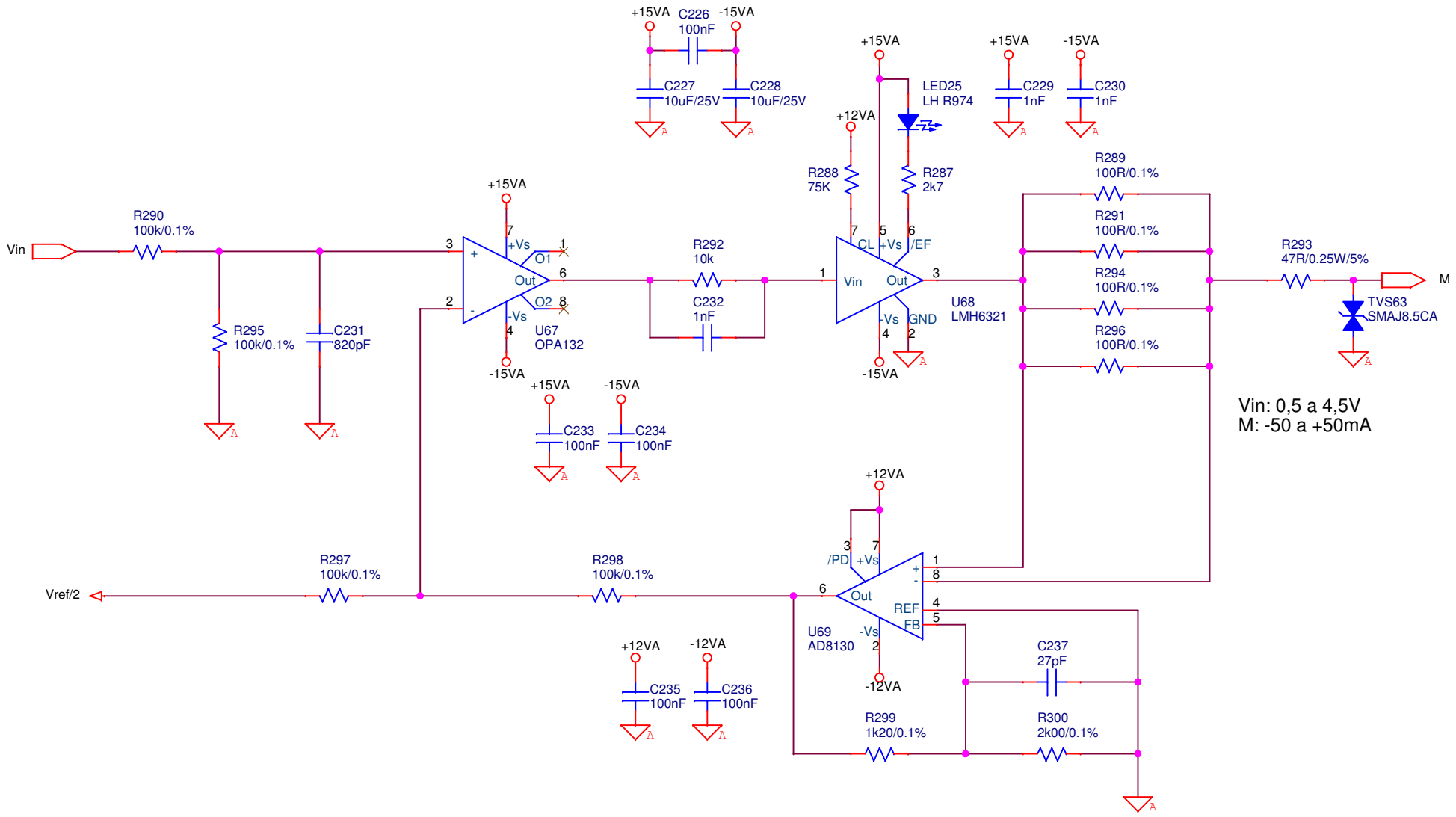

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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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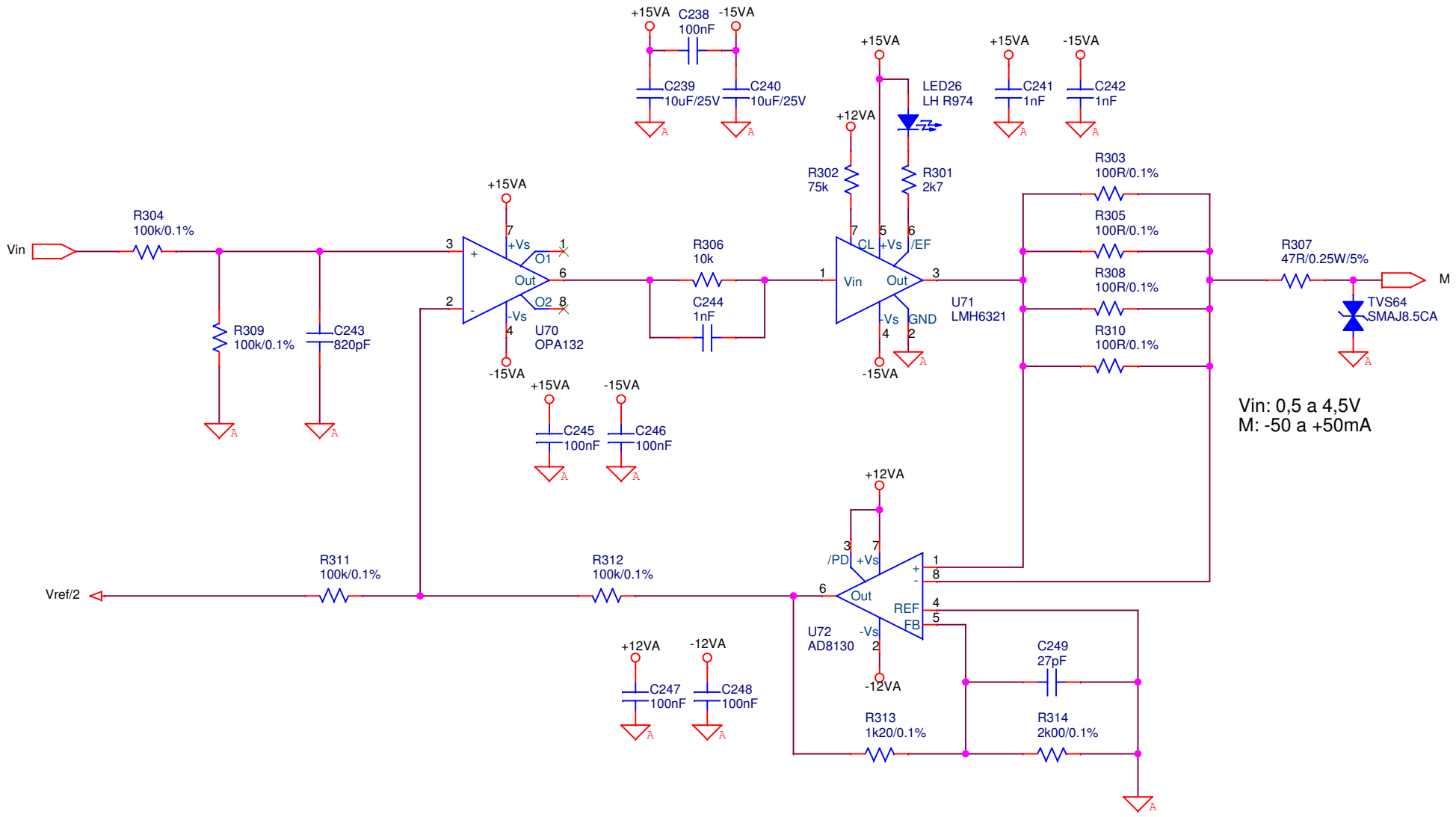

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Size A4	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
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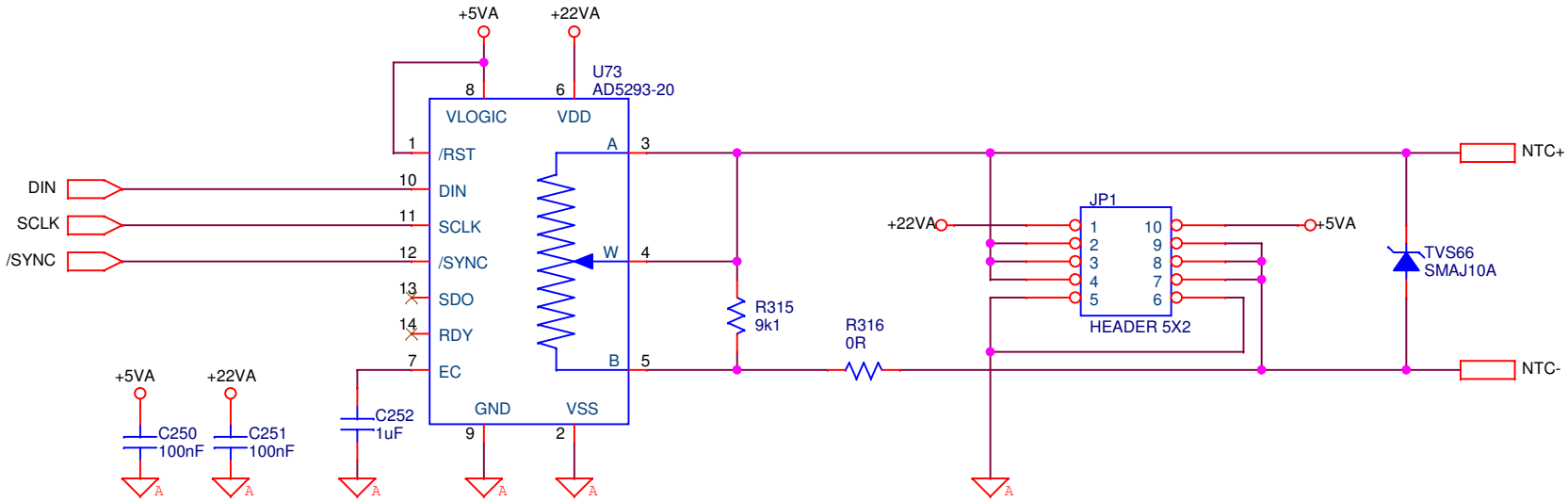

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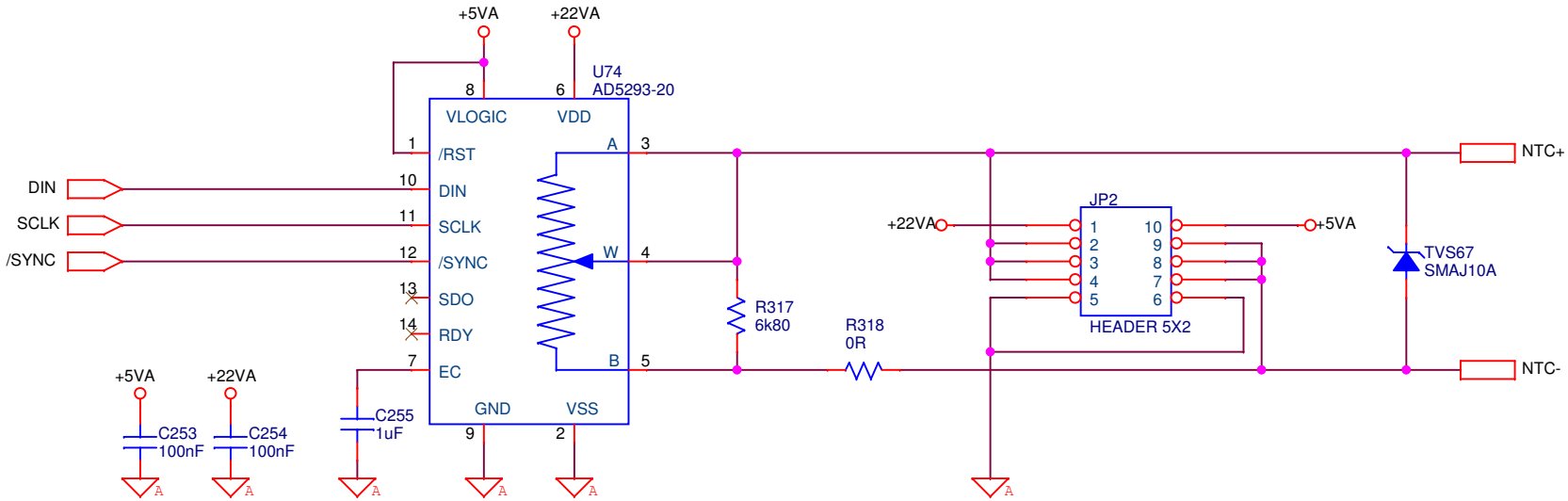
For RNTC=0.5k Program RWB=529R (01Bh)
For RNTC=0.3k Program RWB=310R (00Fh)

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B4B17 NTC1 ISO B4B17		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 28 of 41



For RNTC=5k0 Program RWB=18k9 (3C7h)
For RNTC=3k3 Program RWB=6k41 (148h)
For RNTC=1k0 Program RWB=1k17 (03Ch)

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B4B18 PTC ISO B4B18		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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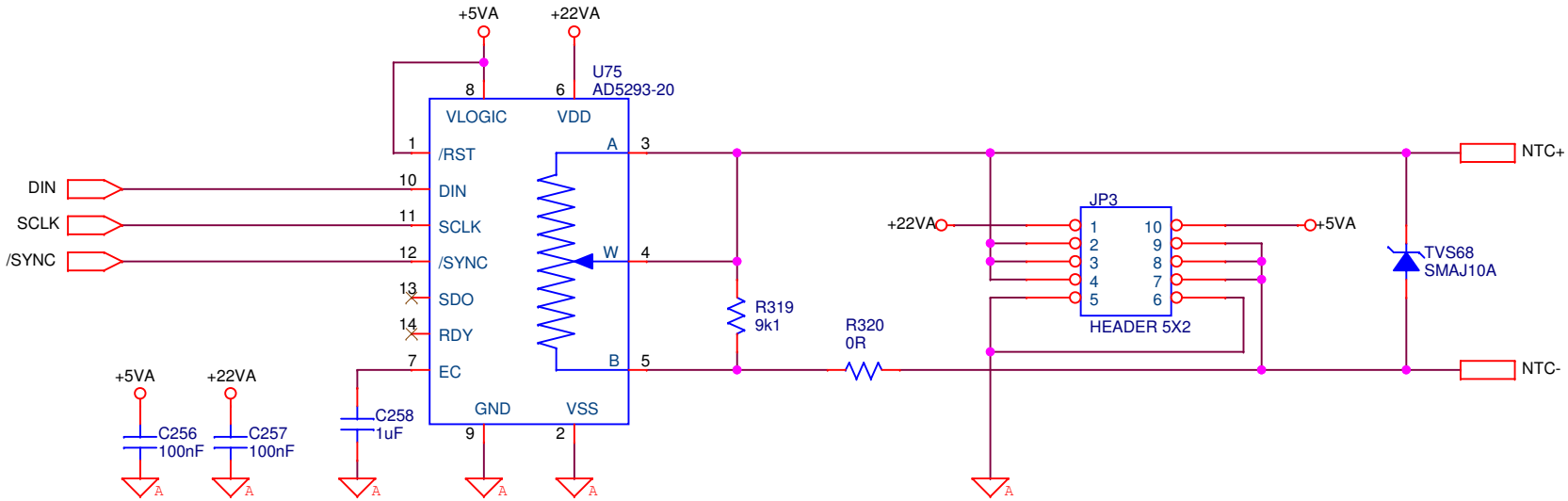

For RNTC=6.0k Program RWB=17k6 (385h)
For RNTC=2.0k Program RWB=2k56 (083h)
For RNTC=0.4k Program RWB=418R (015h)
For RNTC=0.3k Program RWB=310R (00Fh)

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B4B19 NTC MED B4B19		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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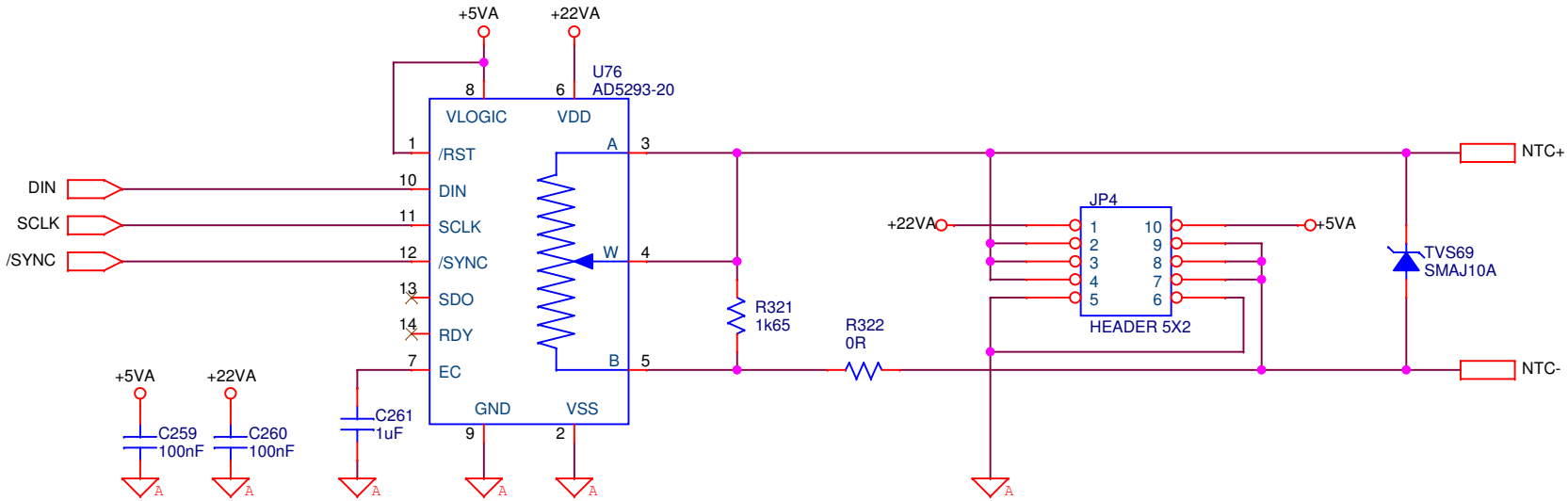

For RPt1000=1k5 Program RWB=16k5 (34Ch)
For RPt1000=1k3 Program RWB=6k13 (139h)
For RPt1000=1k0 Program RWB=2k54 (081h)
For RPt1000=0k9 Program RWB=1k89 (065h)

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B4B20 Pt1000 NISO B4B20		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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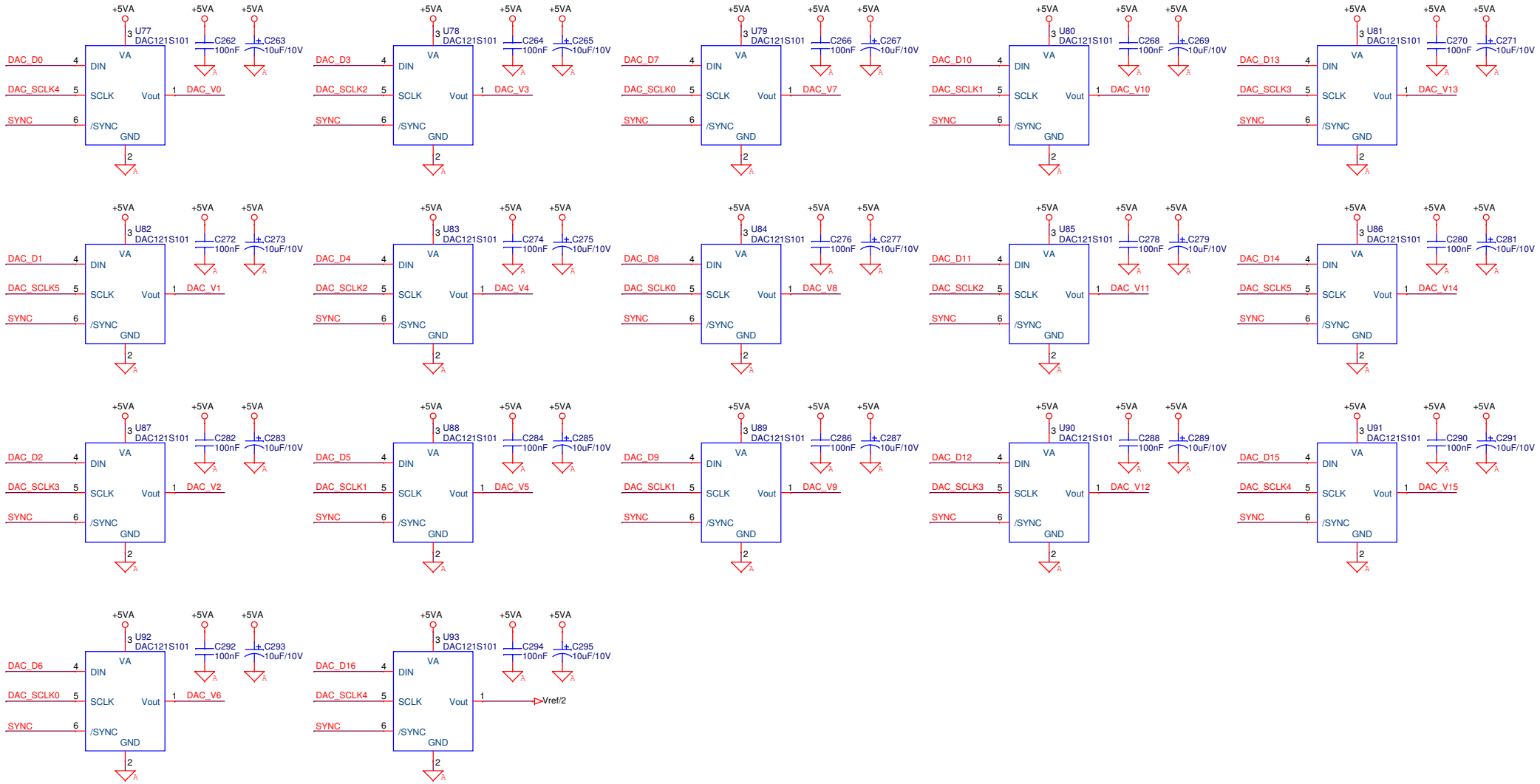
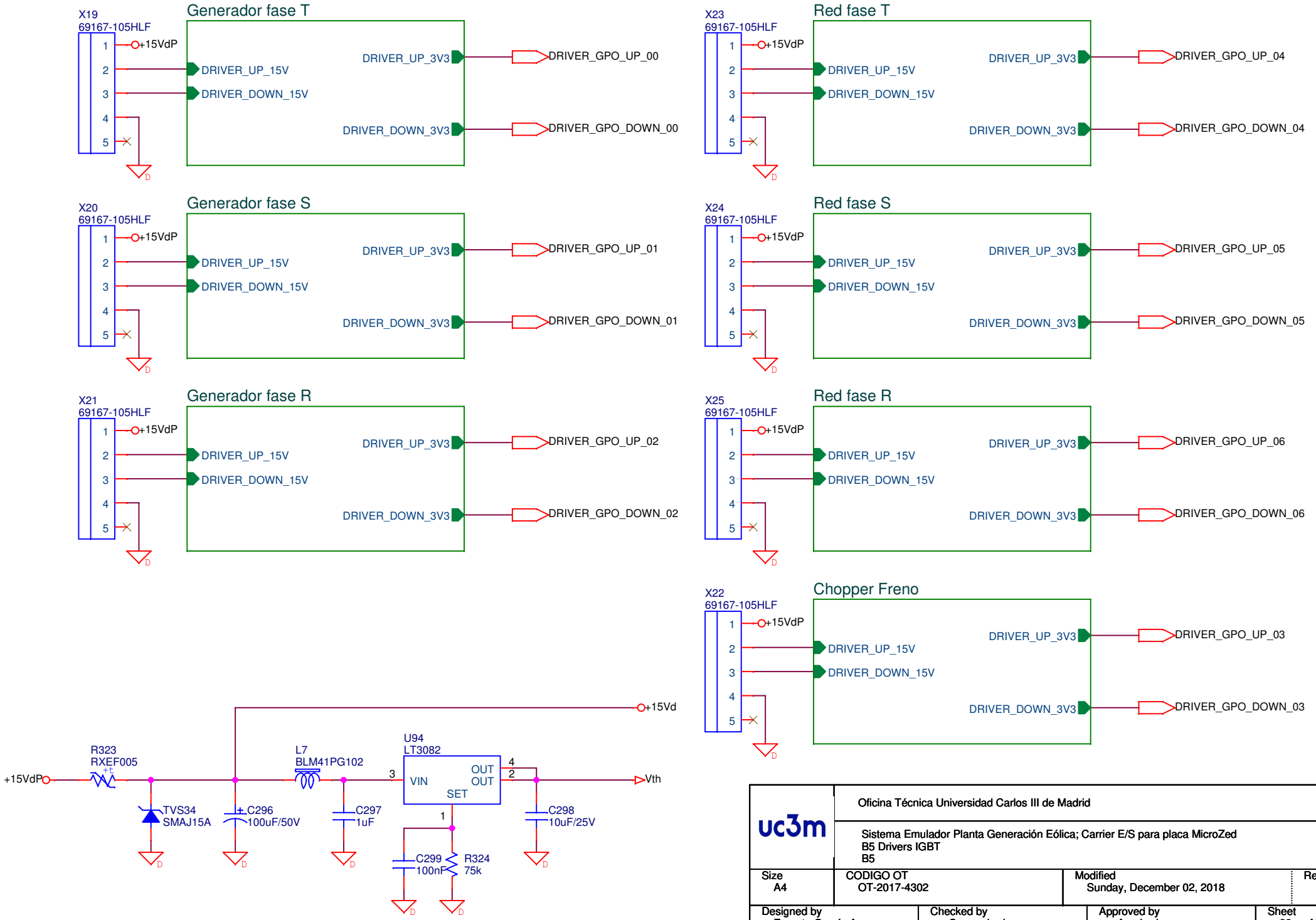
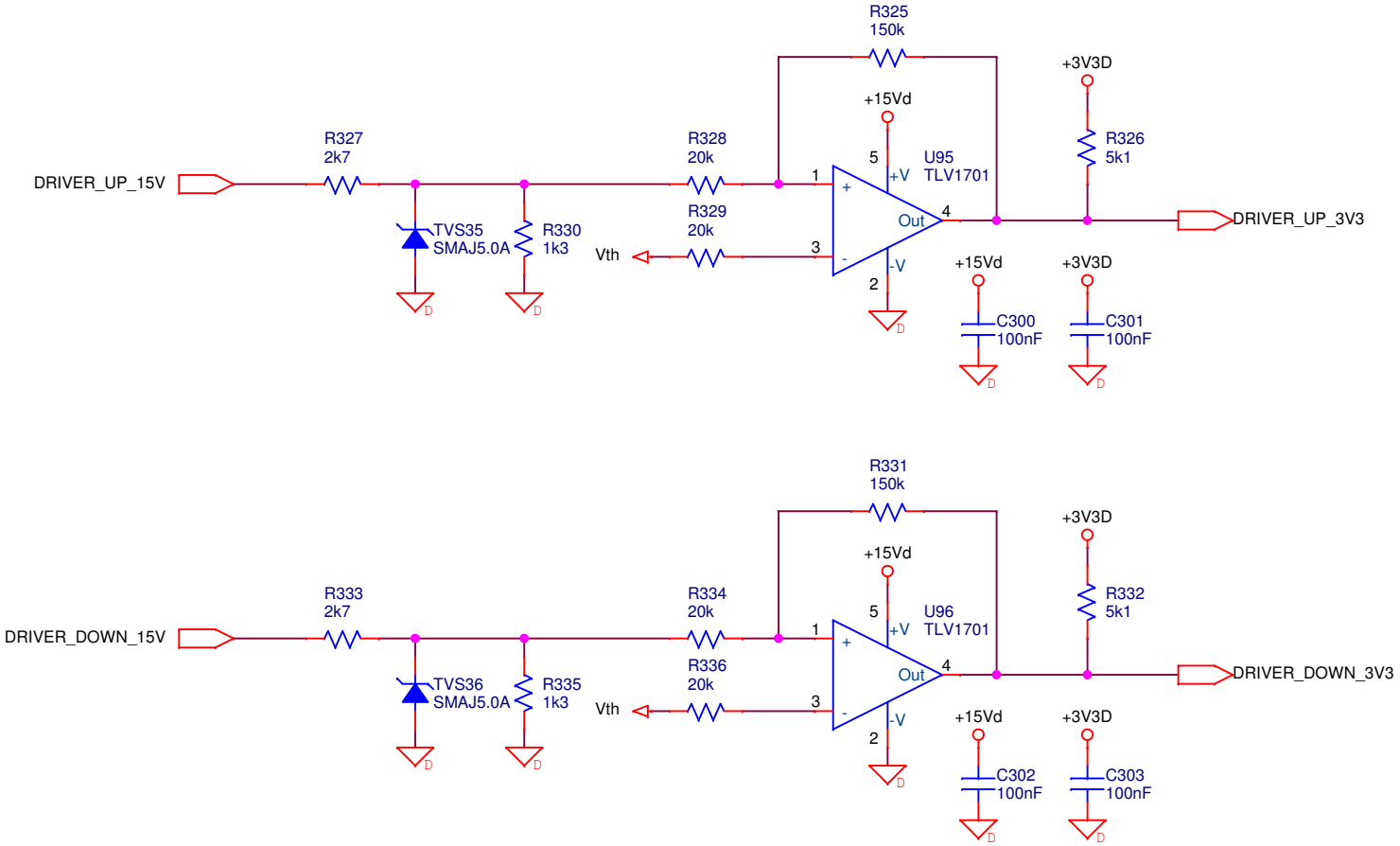


uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B4B21 DAC B4B21		
Size A3	CODIGO OT OT-2017-4302	Modified Sunday, February 11, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 32 of 41



uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B5 Drivers IGBT B5		
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 33 of 41



uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B5B1Generador fase T B5B1		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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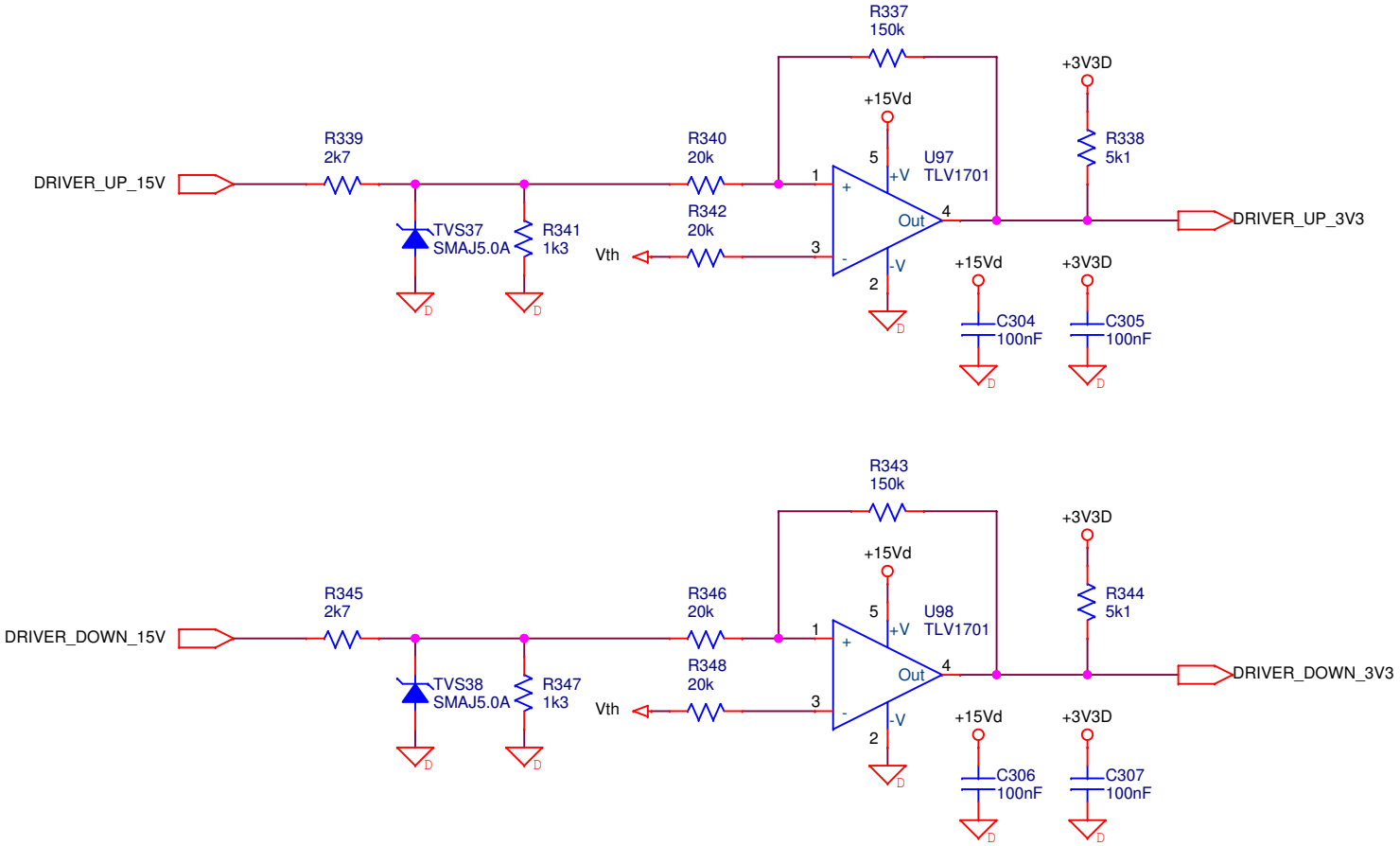

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B5B2 Generador fase S B5B2		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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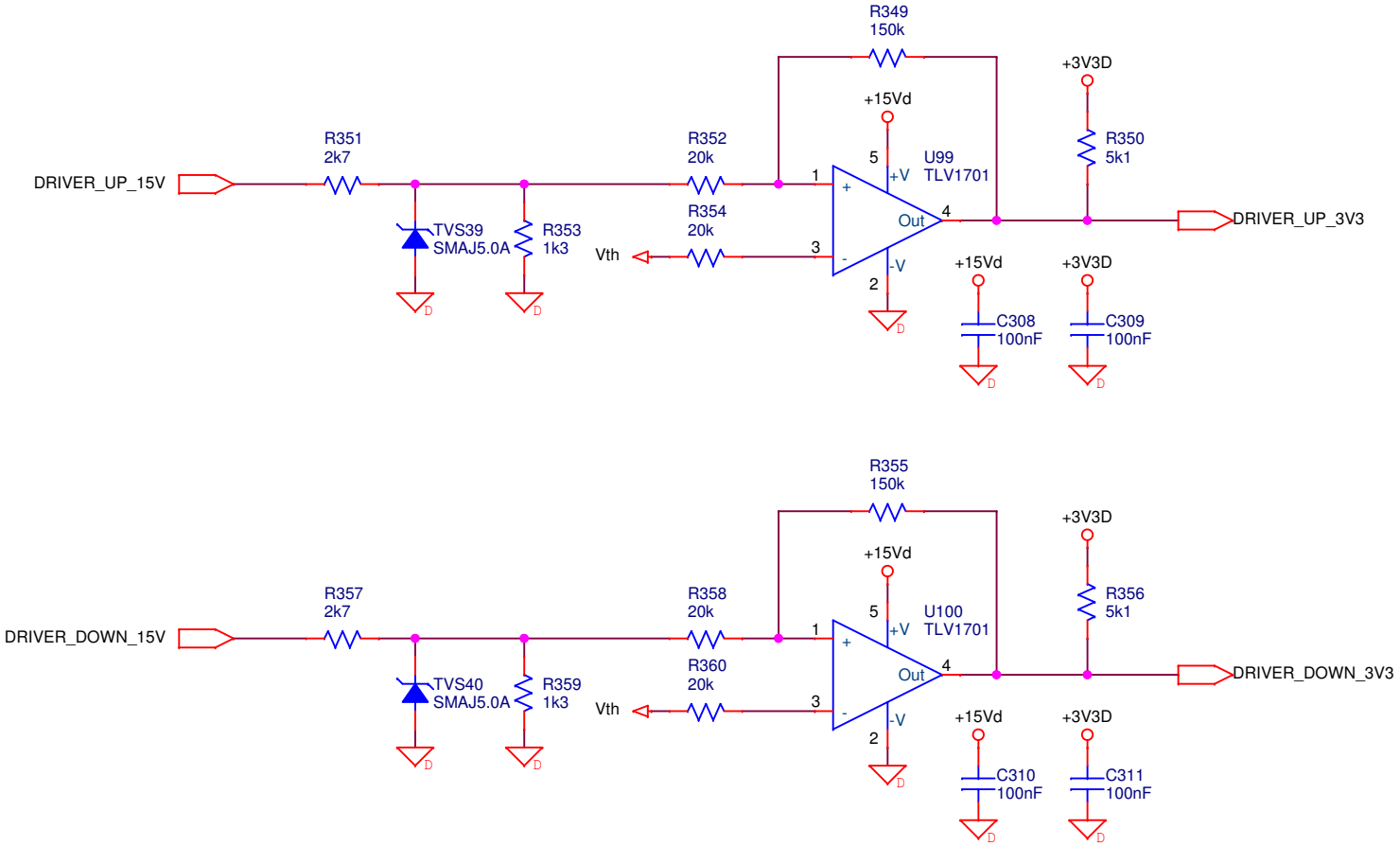

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B5B3 Generador fase R B5B3		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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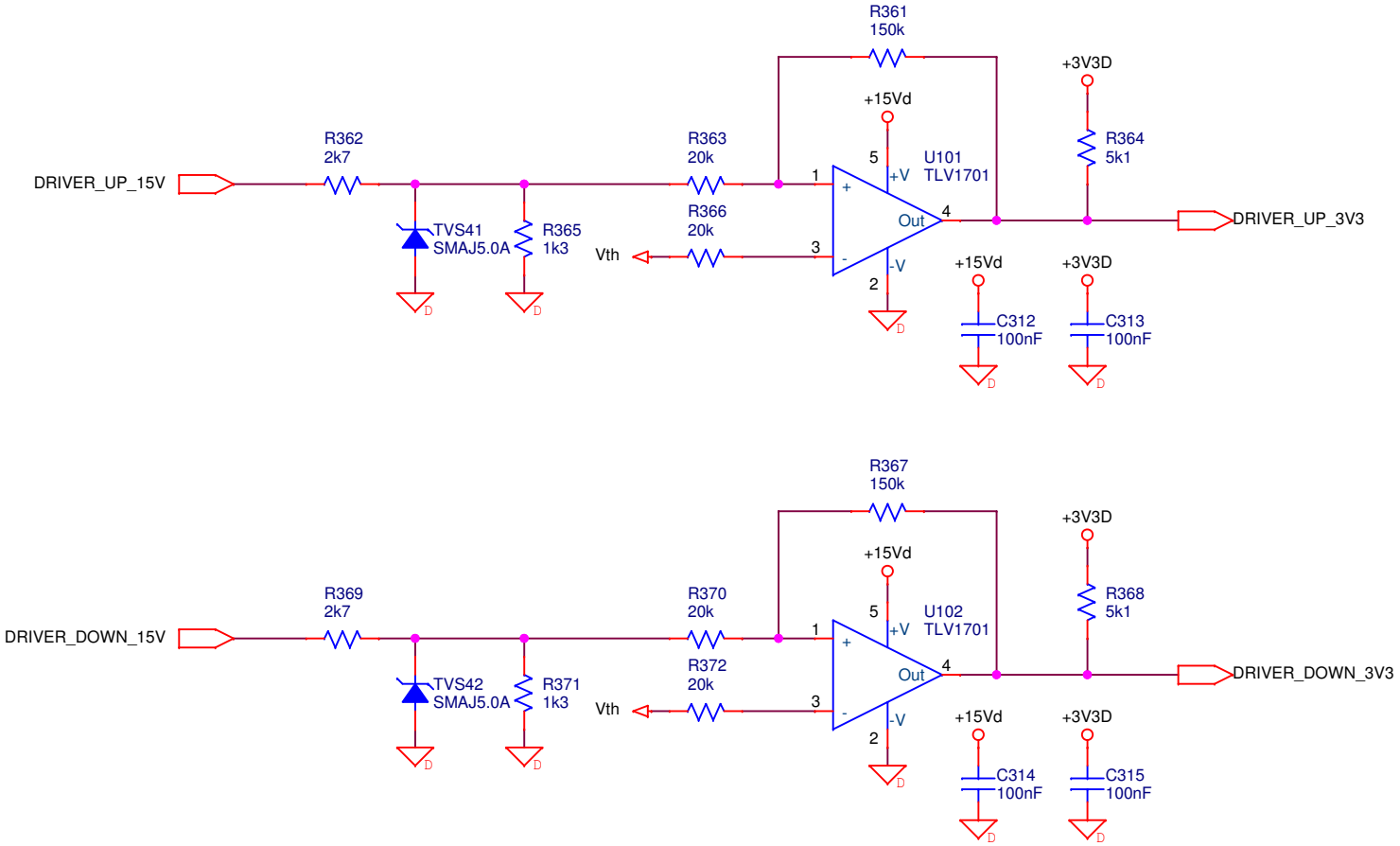

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B5B4 Chopper Freno B5B4		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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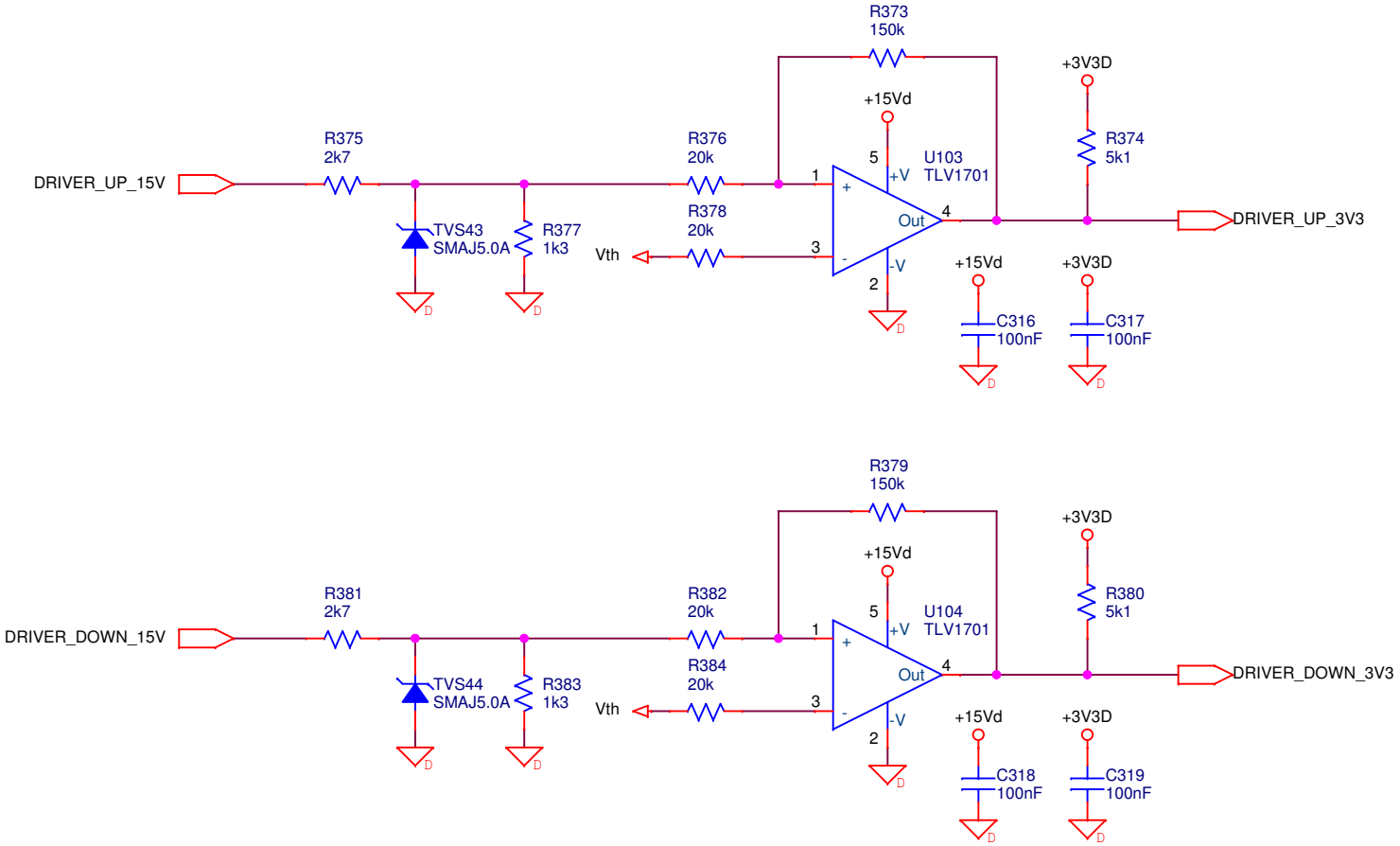

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B5B5 Red fase T B5B5		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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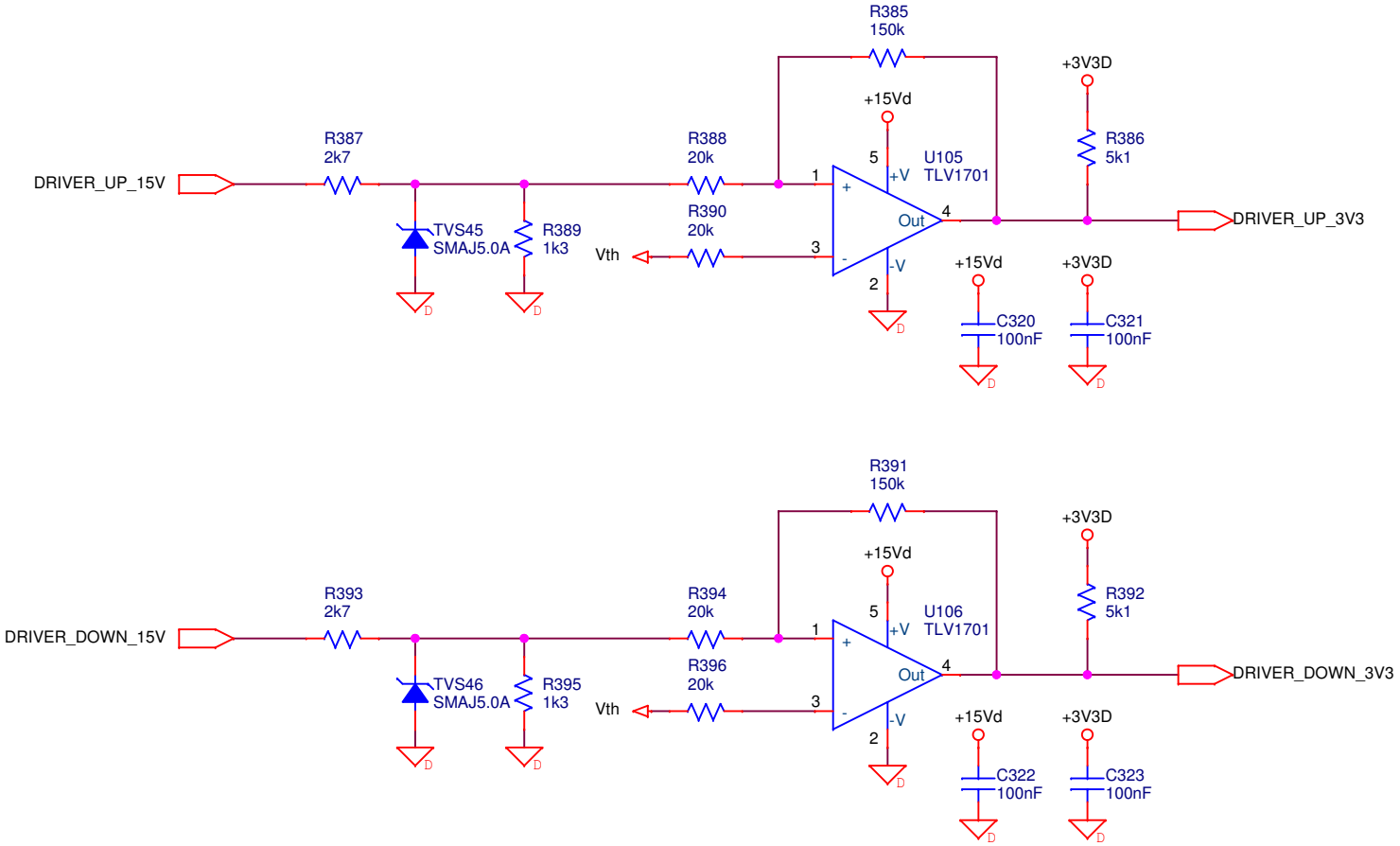

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B5B6 Red fase S B5B6		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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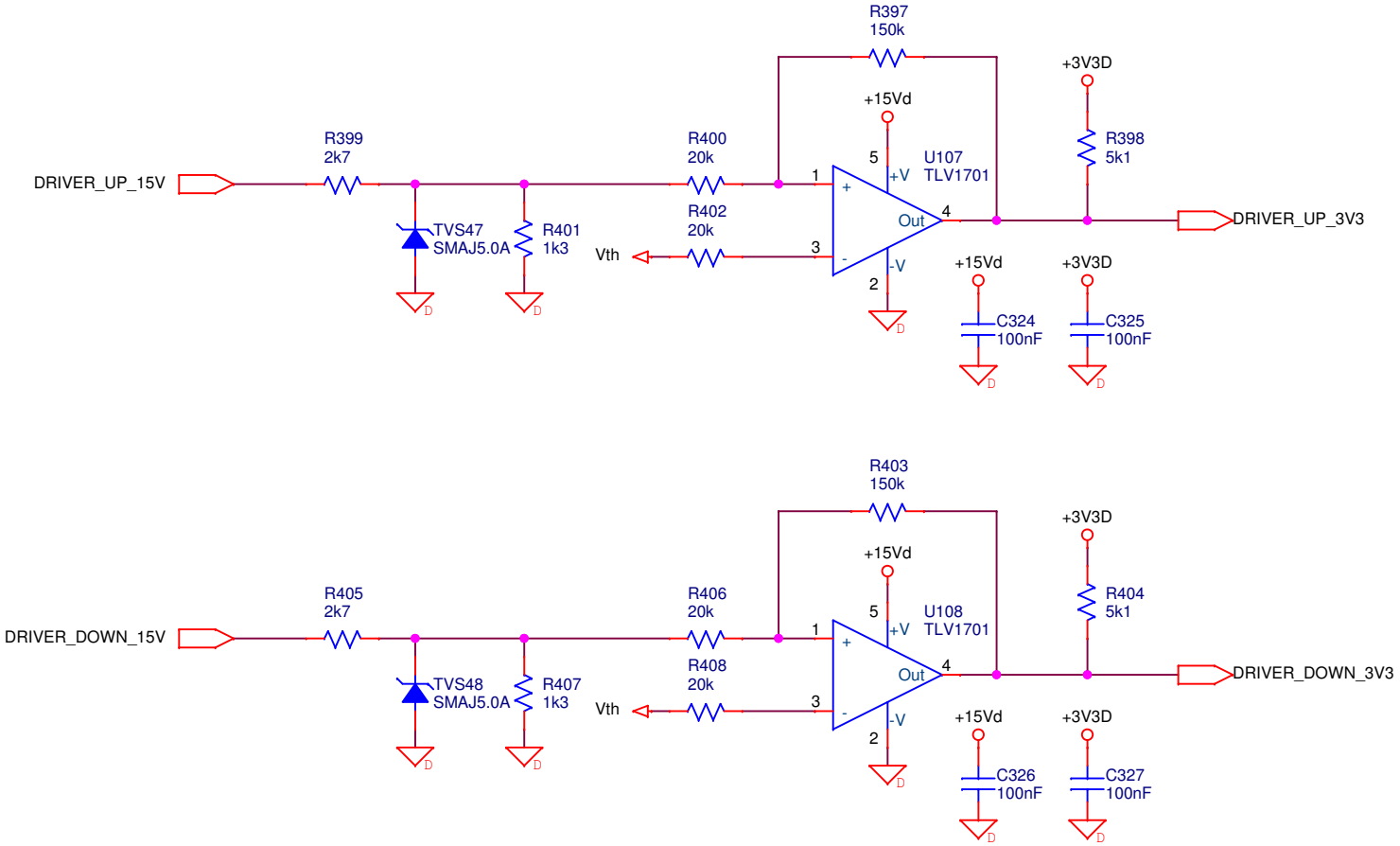

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed B5B7 Red fase R B5B7		
Size A4	CODIGO OT OT-2017-4302	Modified Wednesday, January 31, 2018	Rev 1.0
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ECP 1

DATE
Jan. 2nd 2018

ITEMS IMPACTED
V1Rx: BOM

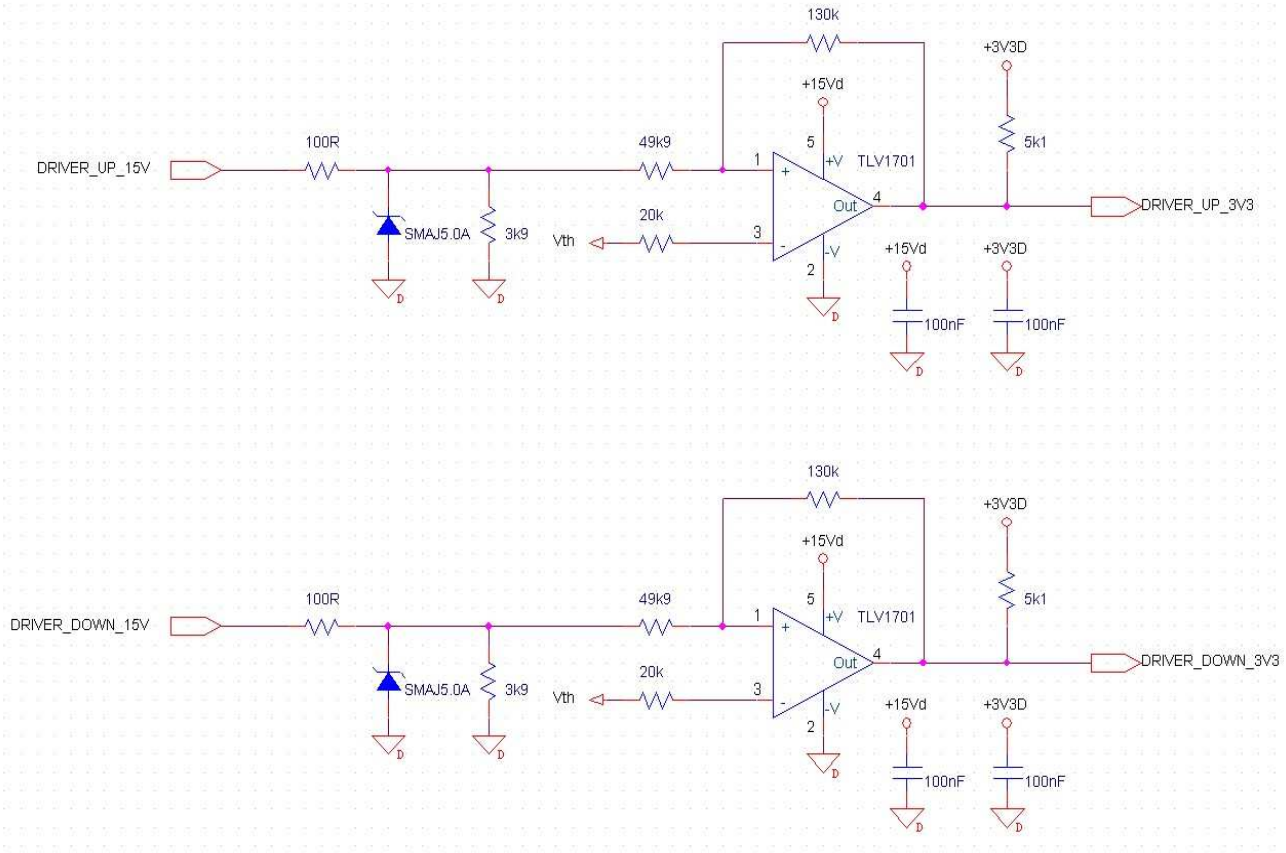
BLOCKS IMPACTED
B5, B5B1, B5B2, B5B3, B5B4, B5B5, B5B6, B5B7

CHANGES
Change R324 in B5 to 182K/1%;

Change resistor values in B5B1, B5B2, B5B3, B5B4 B5B5, B5B6 & B5B7 as shown.

REASON
Possible change in driver control signal levels from 0-15V to 0-5V.

ACTION
Use original component values for 0-15V driver control signals.
Use new values proposed herein for 0-5V driver control signals.



uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed Engineering Change Proposals ECP1		
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
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ECP 2

DATE
Jan. 2nd 2018

ITEMS IMPACTED
V1Rx: BOM

V2Rx: PCB

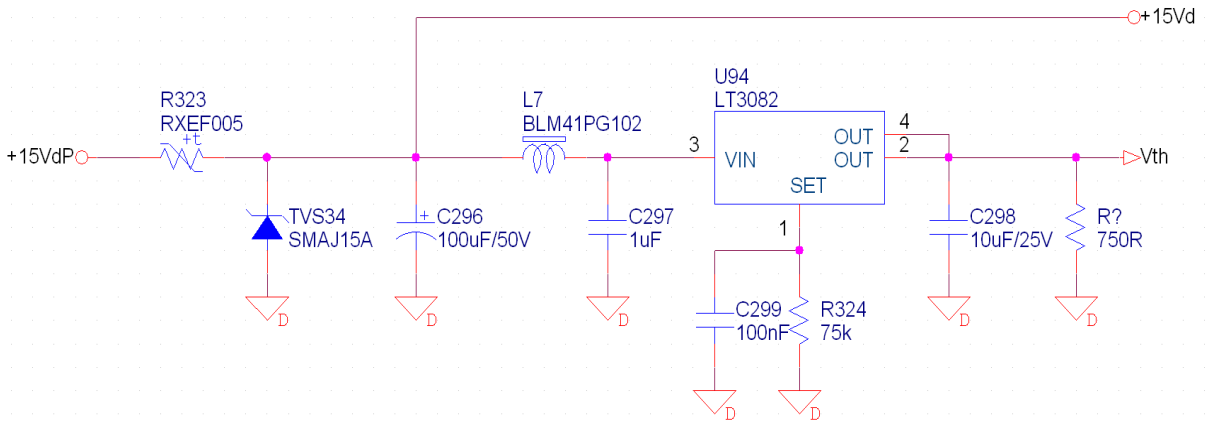
BLOCKS IMPACTED
B5

CHANGES
Add 750R 0805 Resistor in parallel with C298 as shown.

REASON
U94 requires 1mA minimum output current.

ACTION
V1Rx: Solder Resistor on top of C298.

V2Rx: Modify PCB design to include the new resistor.



uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed Engineering Change Proposals ECP2		
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
Designed by Ernesto García Ares	Checked by <Comprobado por>	Approved by <Aprobado por>	Sheet 41 of 41

ECP 3

DATE
Jan. 2nd 2018

ITEMS IMPACTED
V2Rx: PCB

BLOCKS IMPACTED
B3B1, B3B2, B3B3, B3B4

CHANGES
Modify footprint for U10, U12, U14, U24.

REASON
Easily available version is 220mil wide.
180 mil package is not readily available.

ACTION
V1Rx: Bend pins inwaard to fit 180mil footprint.

V2Rx: Modify PCB design to include 220 mil footprint

uc3m	Oficina Técnica Universidad Carlos III de Madrid		
	Sistema Emulador Planta Generación Eólica; Carrier E/S para placa MicroZed Engineering Change Proposals ECP3		
Size A4	CODIGO OT OT-2017-4302	Modified Sunday, December 02, 2018	Rev 1.0
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