

Sheet: Power Management

File: F20_Power_Management.sch

Sheet: RIM

File: F20_RIM.sch

Sheet: Powertrain

File: F20_Powertrain.sch

Sheet: Shifter

File: F20_Shifter.sch

Sheet: Driver Display

File: F20_Driver_Display.sch

Sheet: Steering Wheel

File: F20_Steering.sch

Sheet: Brakes

File: F20_Brakes.sch

Sheet: XBEE

File: F20_XBEE.sch

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Sheet: Accelerometer

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Sheet: Tire Temperature Sensors

File: F20_Tire_Temp_Sensors.sch

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Apprvd By:
Drawn By: Cristian Valadez
Model: F20

UIC
Formula SAE

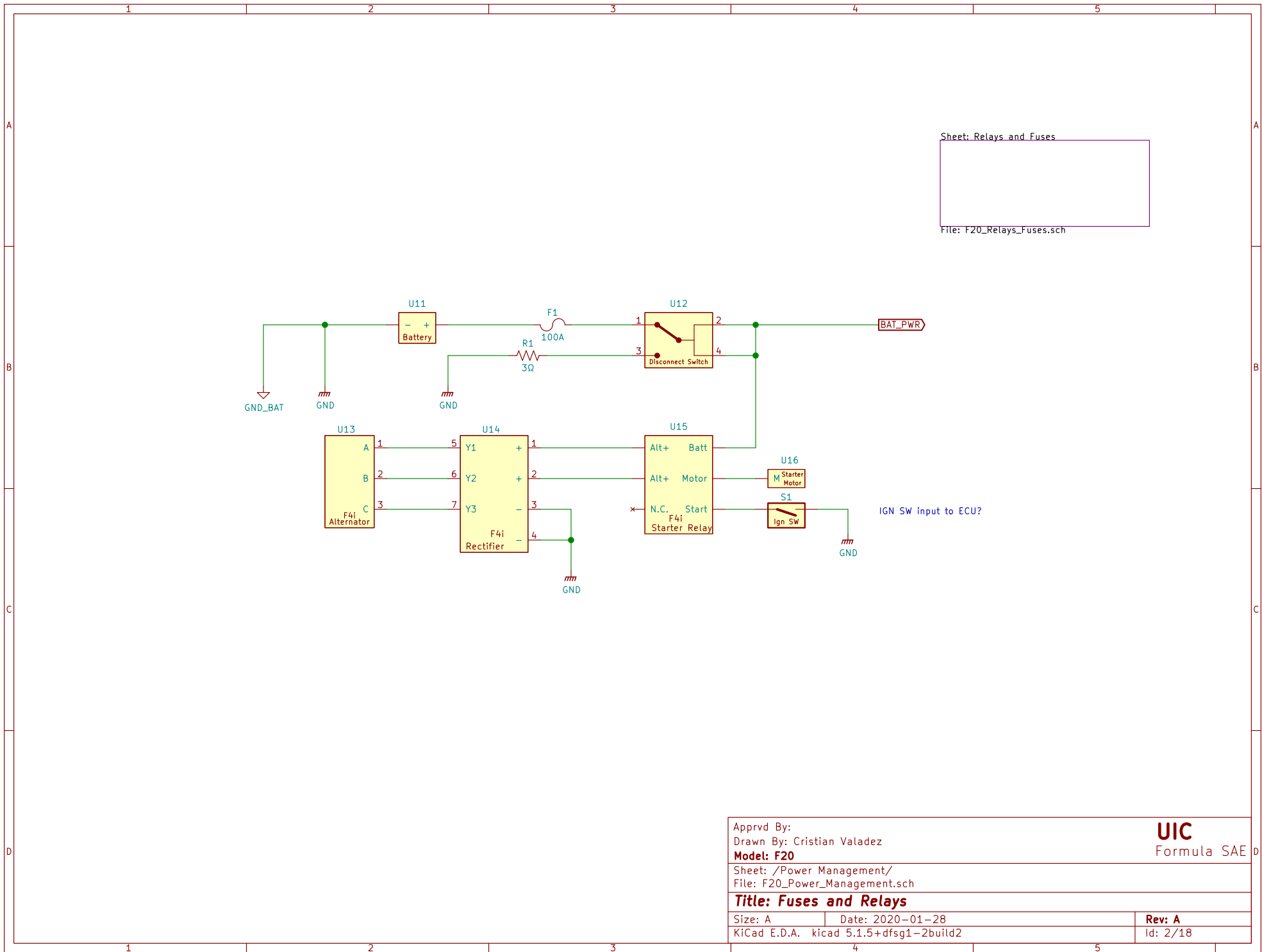
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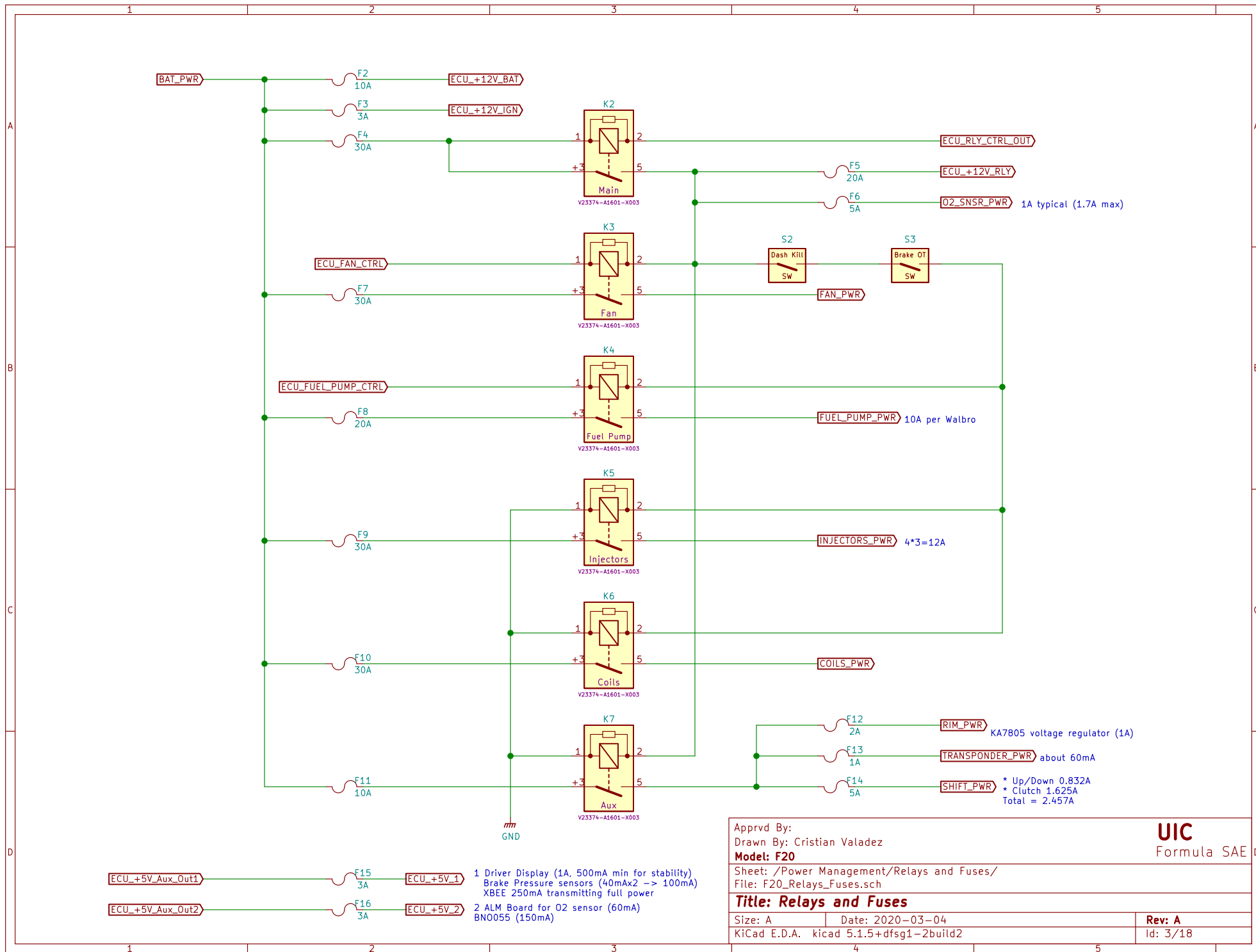
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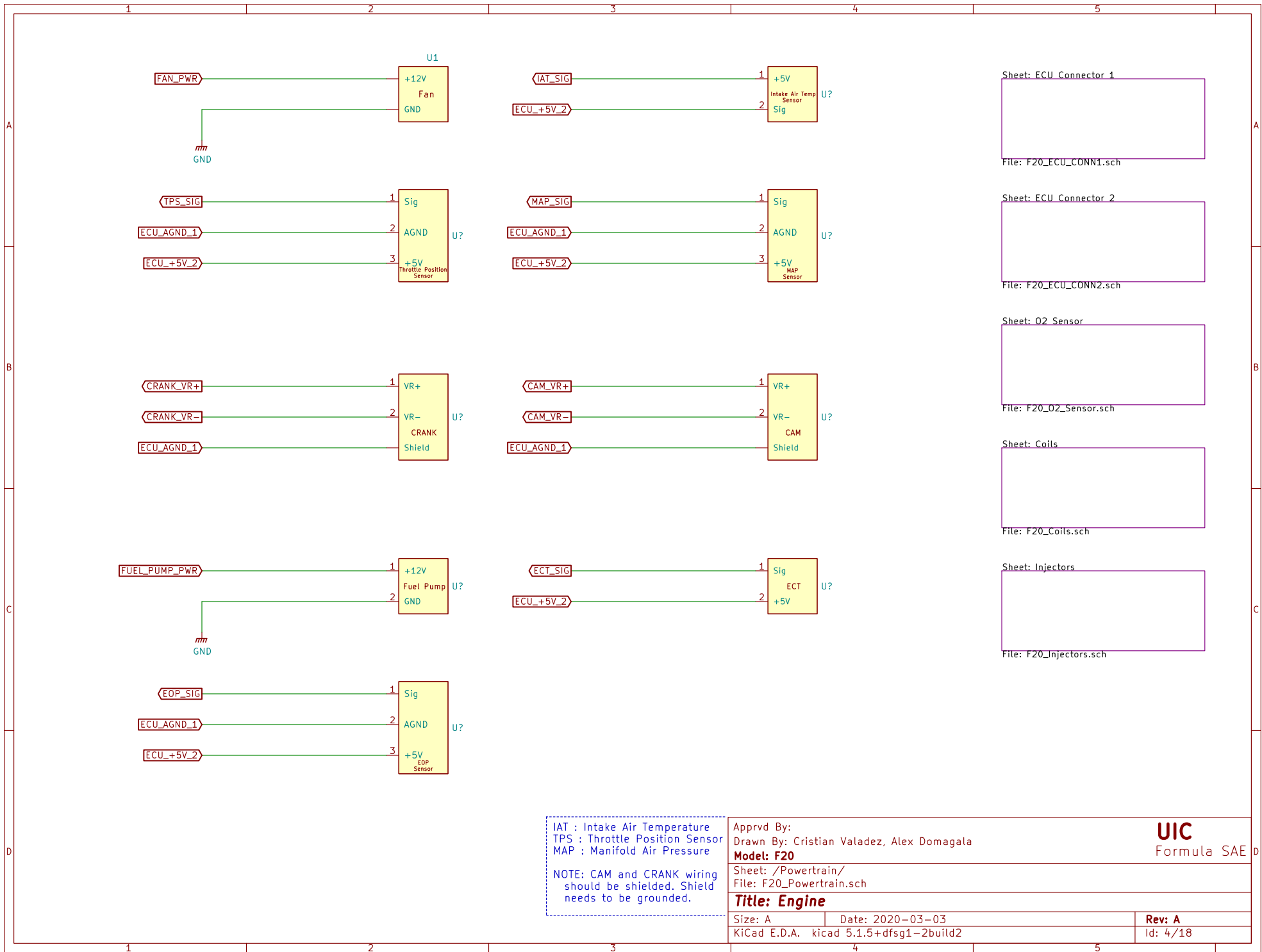
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Date:

Rev: A
Id: 1/18







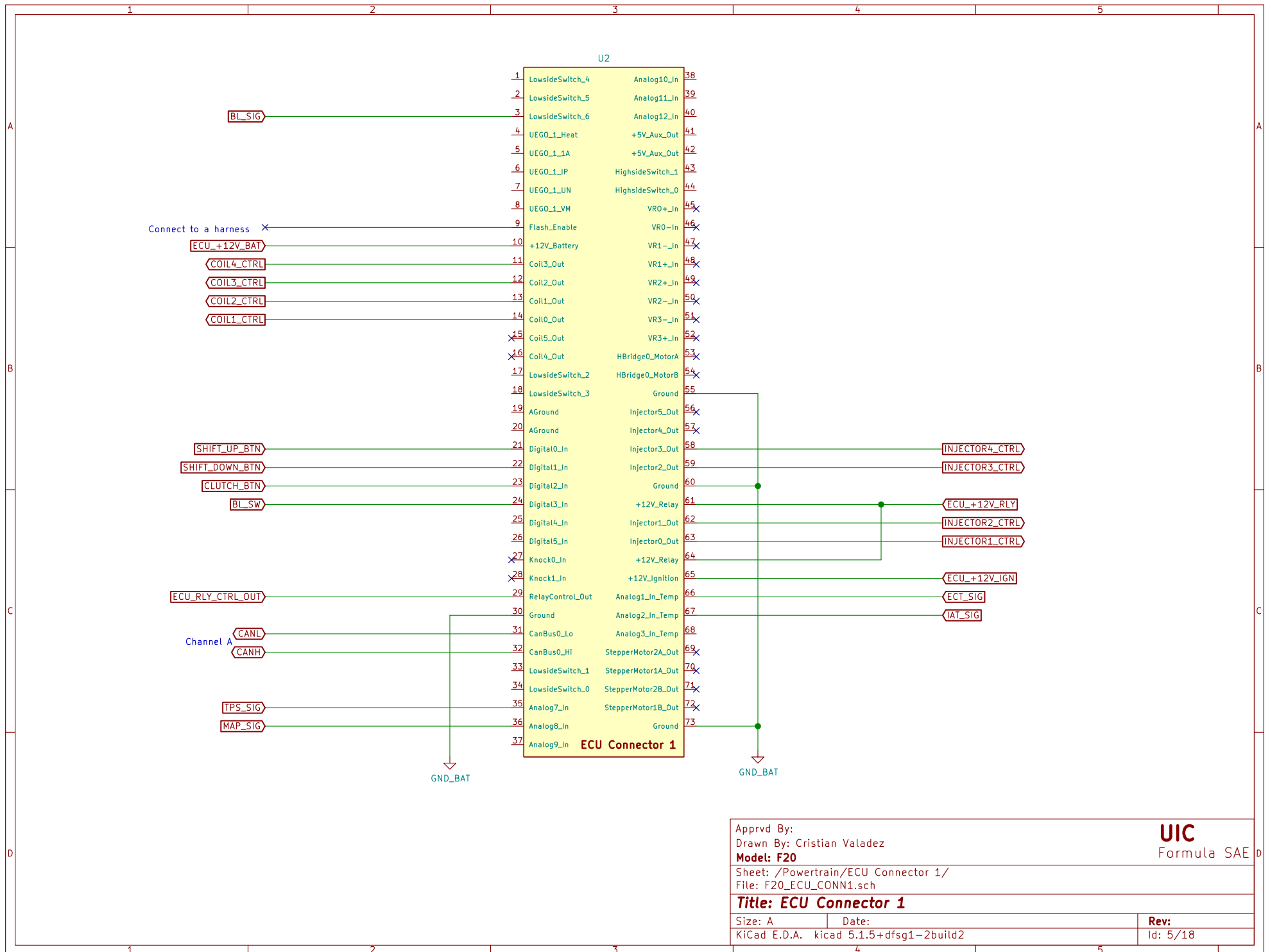
Apprvd By:
Drawn By: Cristian Valadez, Alex Domagala
Model: F20
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File: F20_Powertrain.sch

Title: Engine

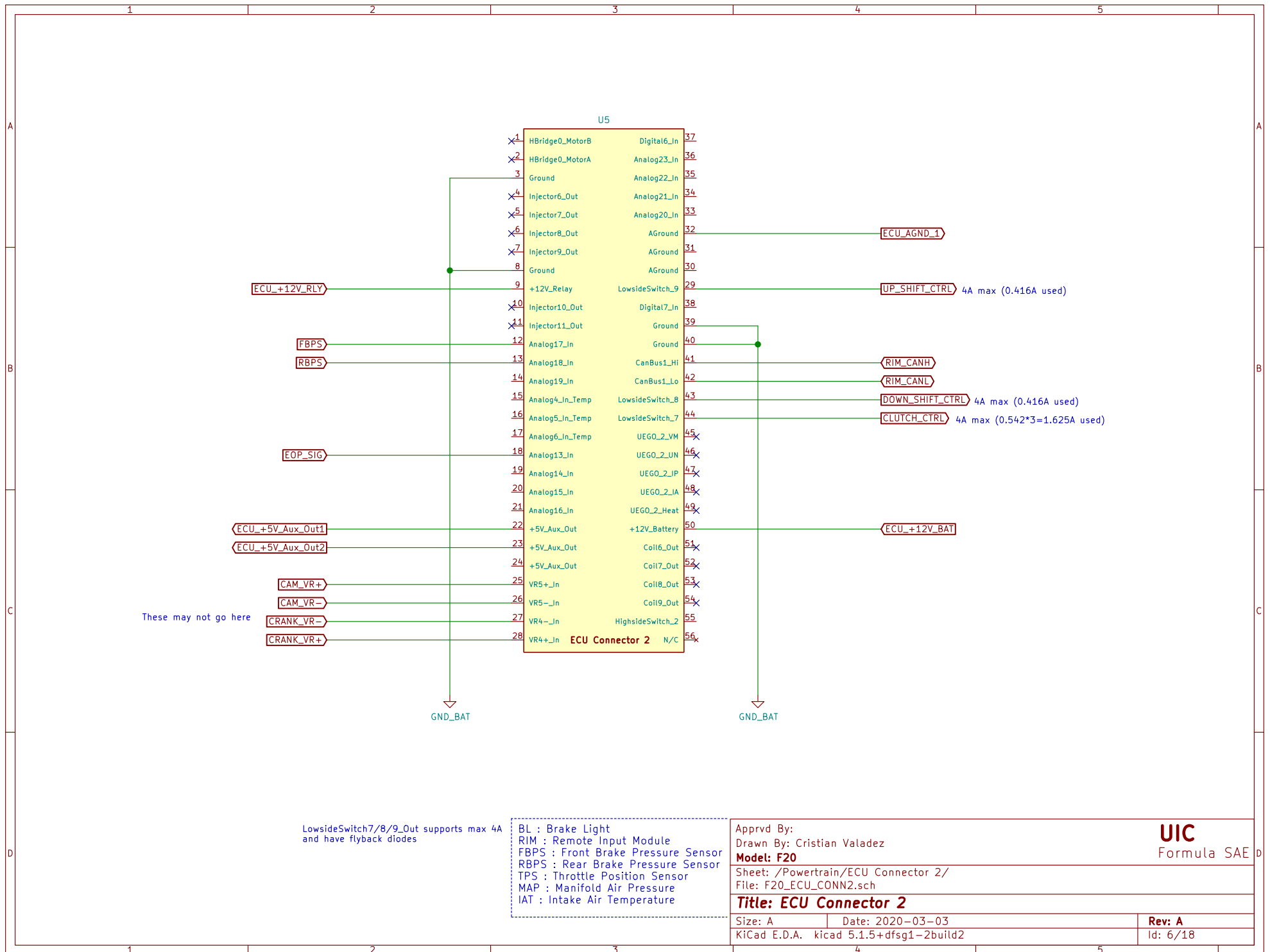
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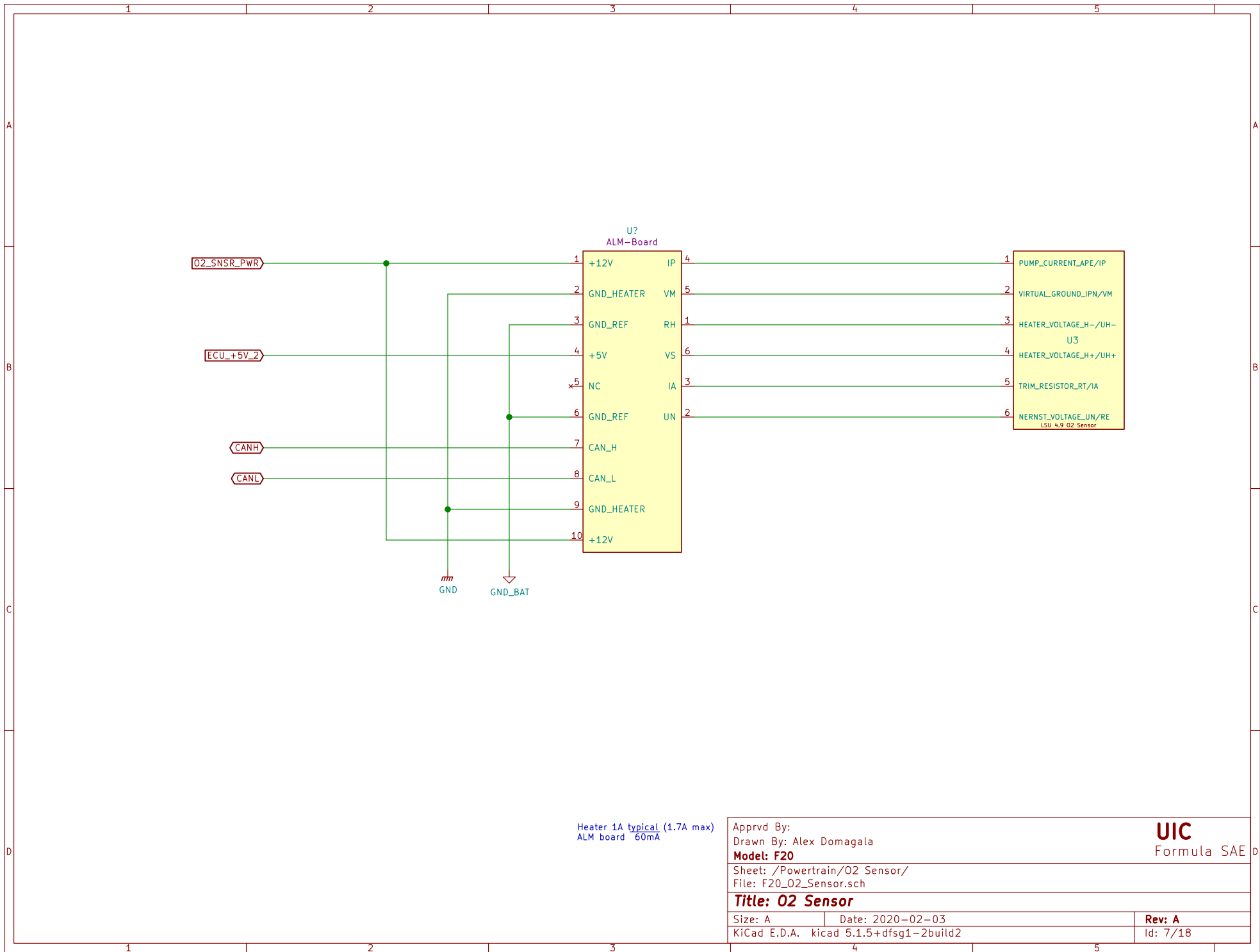
UIC
Formula SAE D

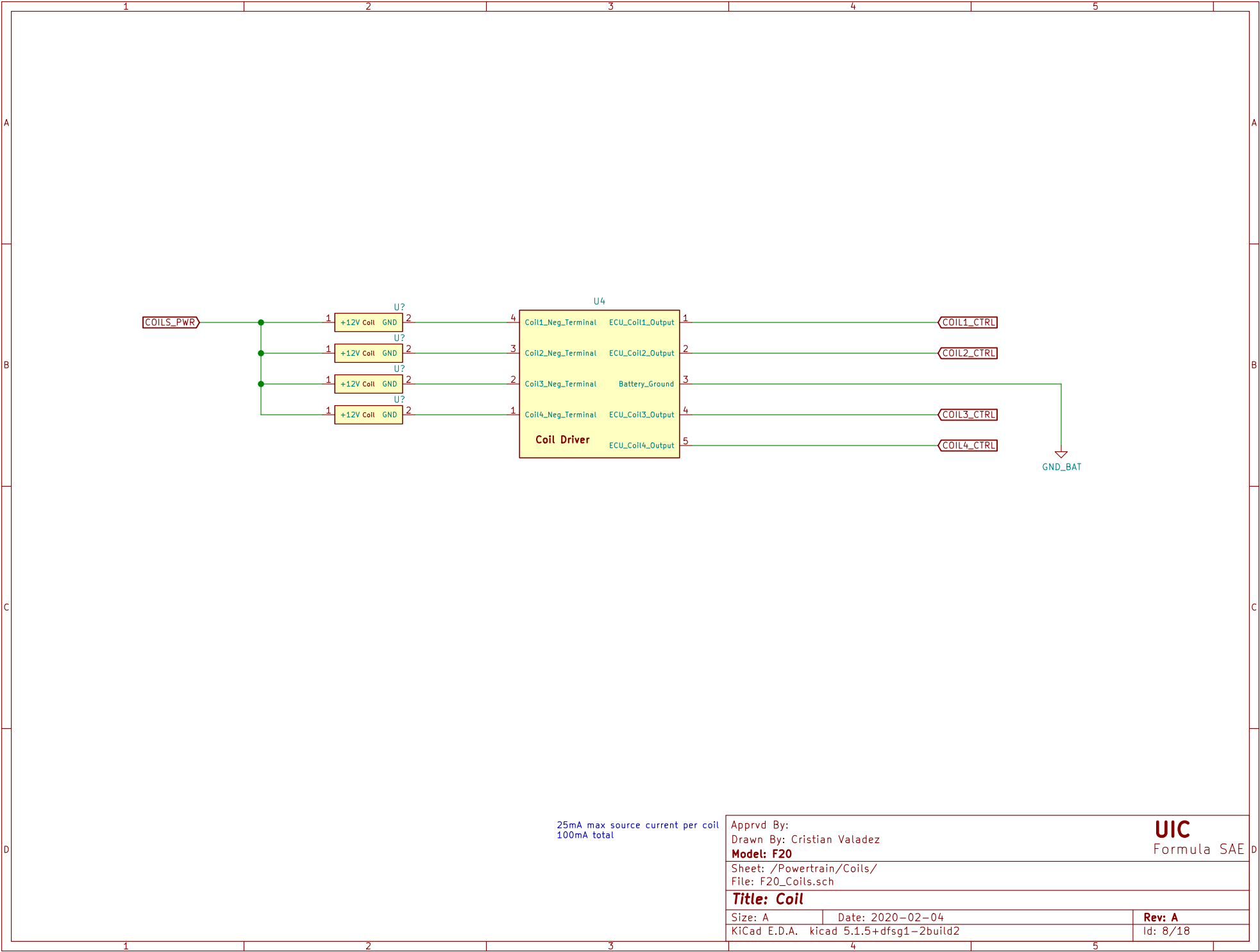
Rev: A
Id: 4/18



Apprvd By:		UIC Formula SAE D
Drawn By: Cristian Valadez		
Model: F20		
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Title: ECU Connector 1		
Size: A	Date:	Rev:
KiCad E.D.A.	kiCad 5.1.5+dfsg1-2build2	Id: 5/18

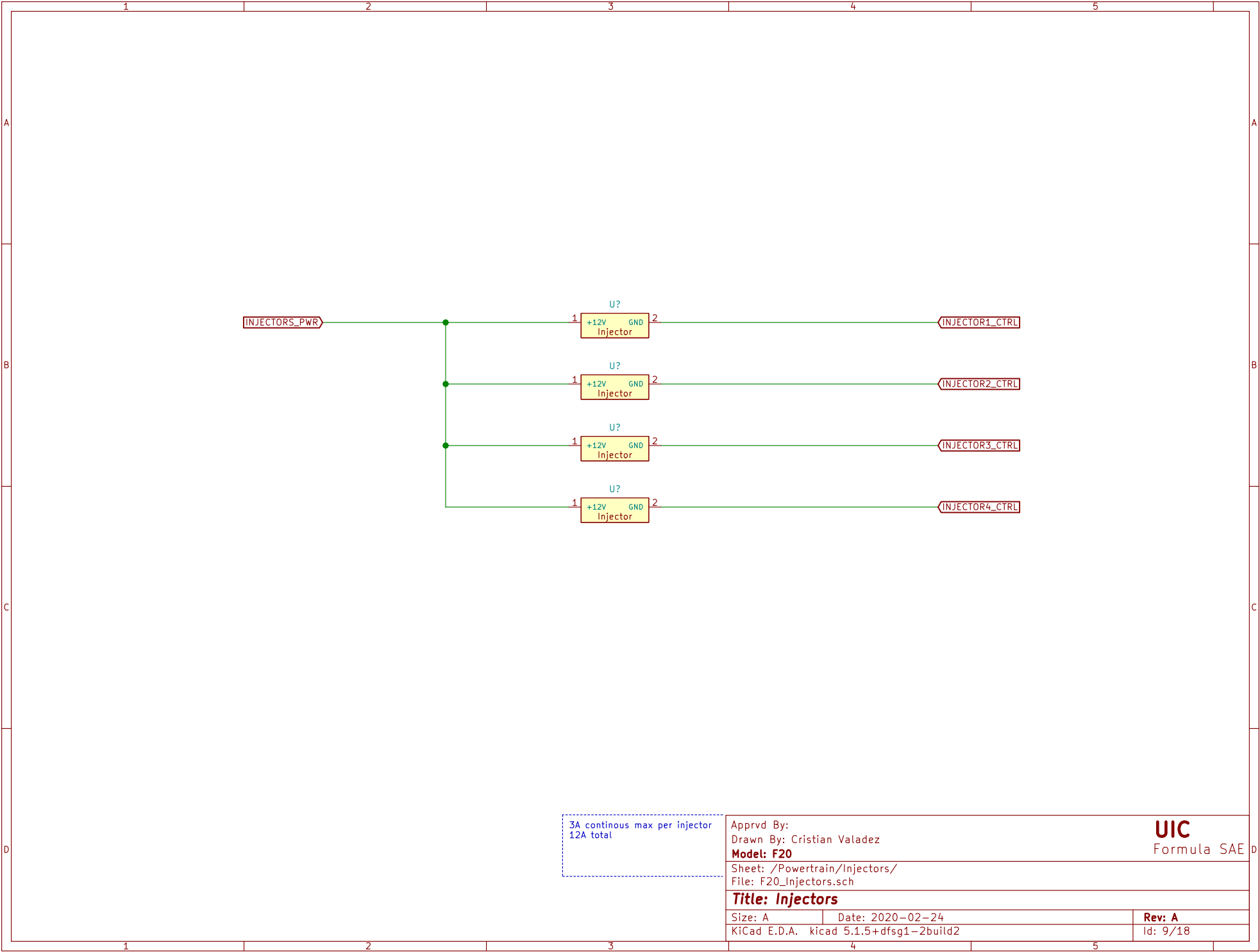






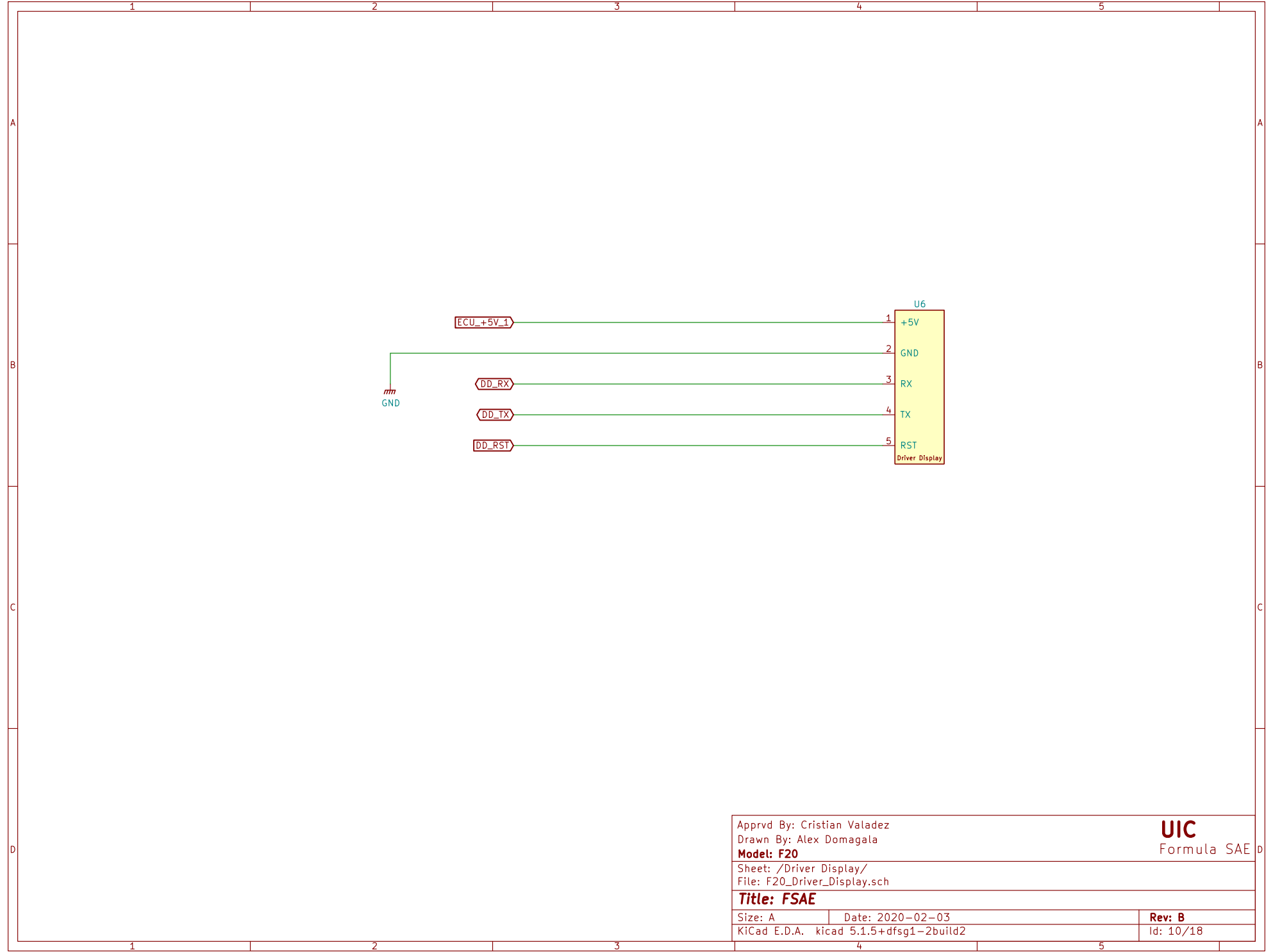
25mA max source current per coil
100mA total

Apprvd By:		UIC
Drawn By: Cristian Valadez		
Model: F20		Formula SAE D
Sheet: /Powertrain/Coils/		
File: F20_Coils.sch		
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Size: A	Date: 2020-02-04	Rev: A
KiCad E.D.A. kicad 5.1.5+dfsg1-2build2		Id: 8/18

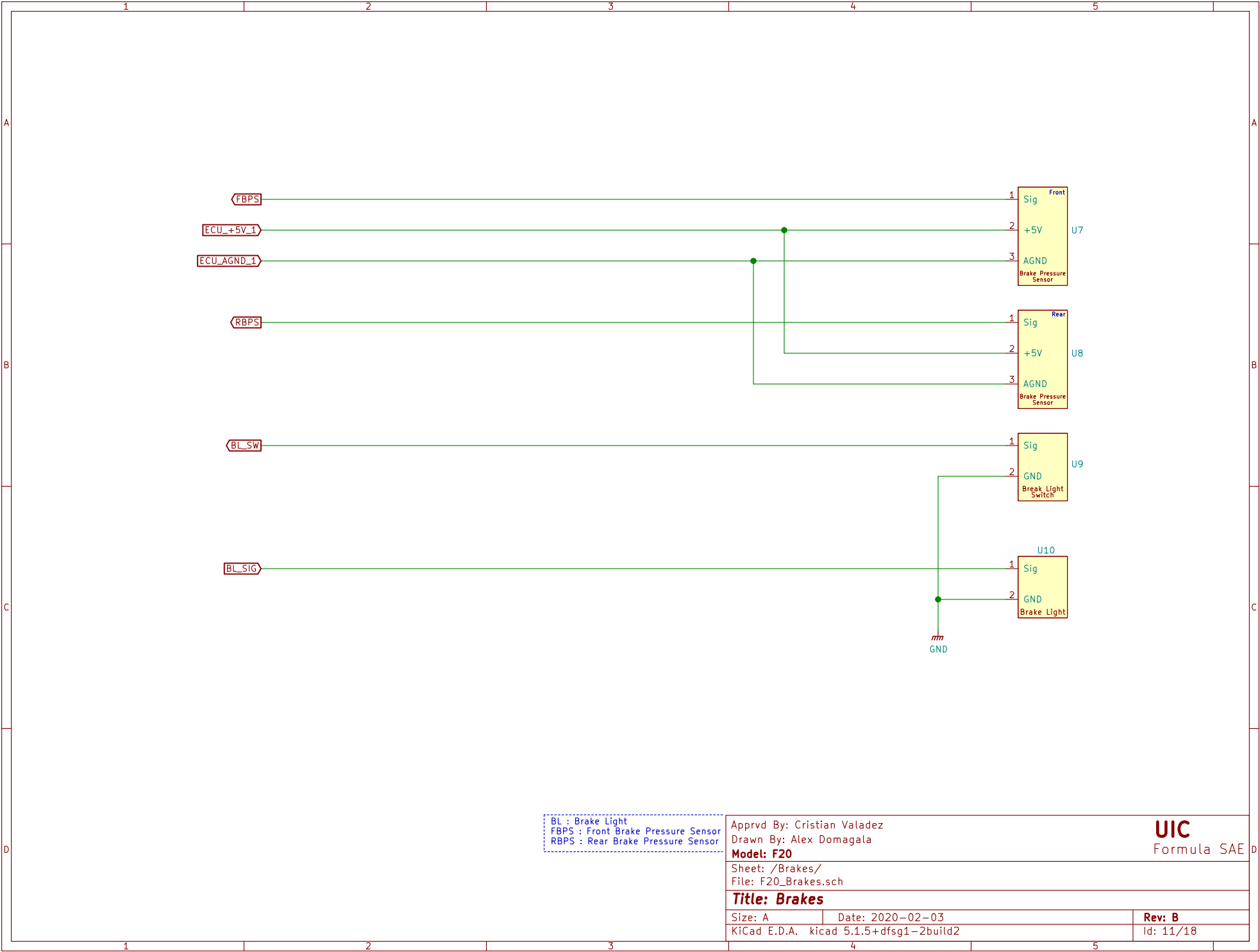


3A continous max per injector
12A total

Apprvd By:		UIC
Drawn By: Cristian Valadez		
Model: F20		Formula SAE D
Sheet: /Powertrain/Injectors/		
File: F20_Injectors.sch		
Title: Injectors		
Size: A	Date: 2020-02-24	Rev: A
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Apprvd By: Cristian Valadez		UIC Formula SAE
Drawn By: Alex Domagala		
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KiCad E.D.A. kicad 5.1.5+dfsg1-2build2		Id: 10/18

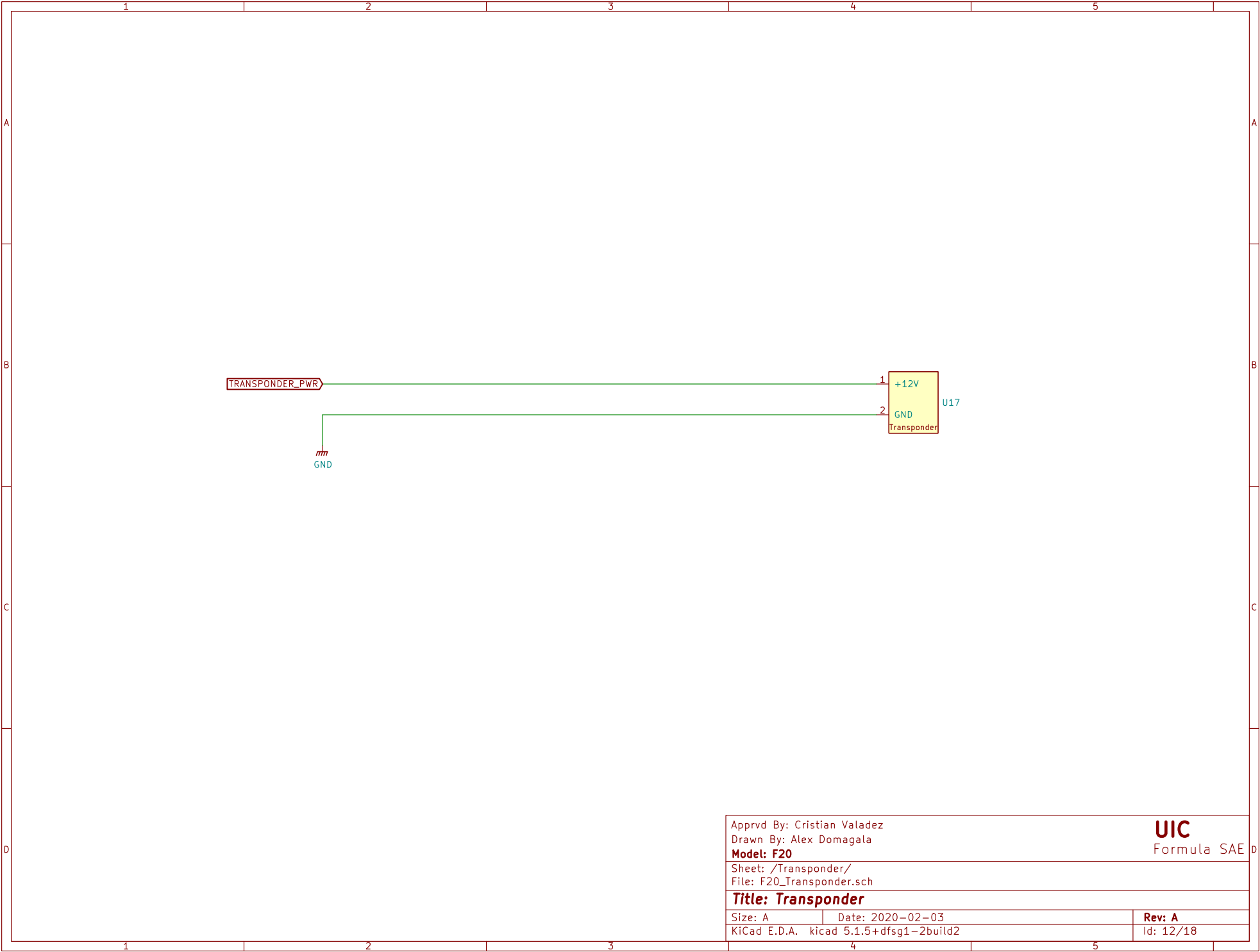


BL : Brake Light
FBPS : Front Brake Pressure Sensor
RBPS : Rear Brake Pressure Sensor

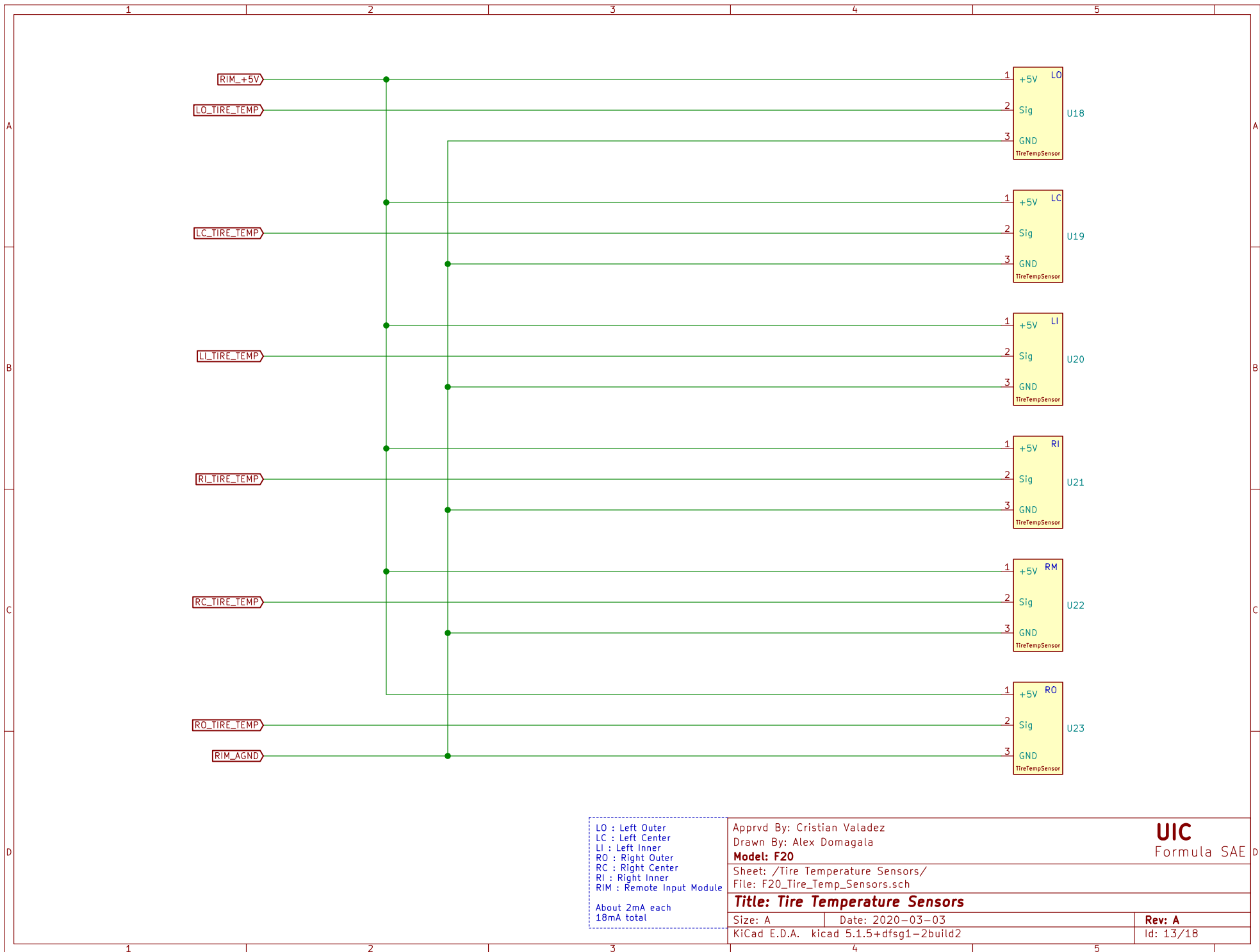
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Drawn By: Alex Domagala
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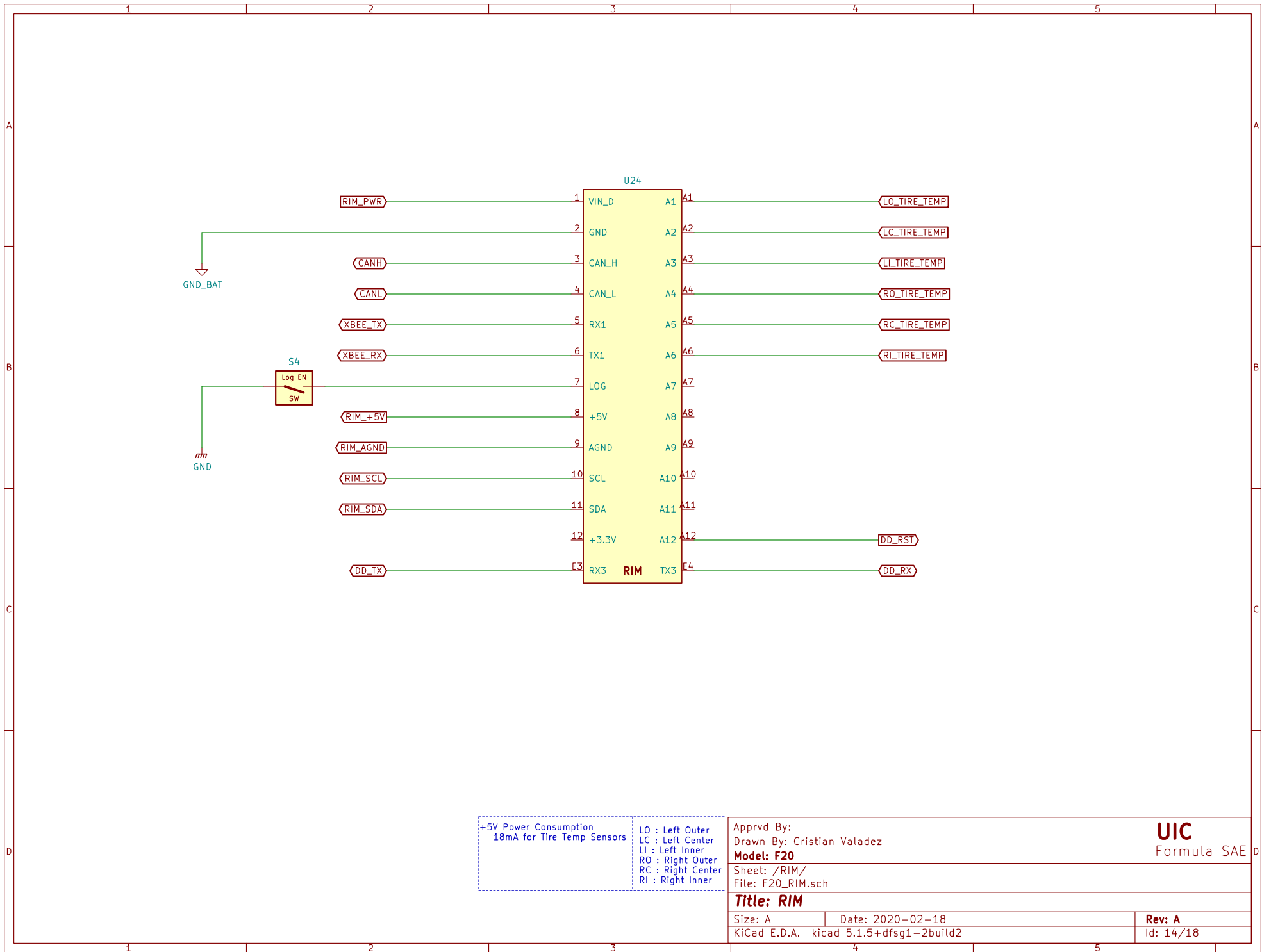
UIC
Formula SAE D

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Rev: B	
Id: 11/18	



Apprvd By: Cristian Valadez		UIC
Drawn By: Alex Domagala		
Model: F20		Formula SAE
Sheet: /Transponder/		
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Title: Transponder		
Size: A	Date: 2020-02-03	Rev: A
KiCad E.D.A. kicad 5.1.5+dfsg1-2build2		Id: 12/18





+5V Power Consumption
18mA for Tire Temp Sensors

LO : Left Outer
LC : Left Center
LI : Left Inner
RO : Right Outer
RC : Right Center
RI : Right Inner

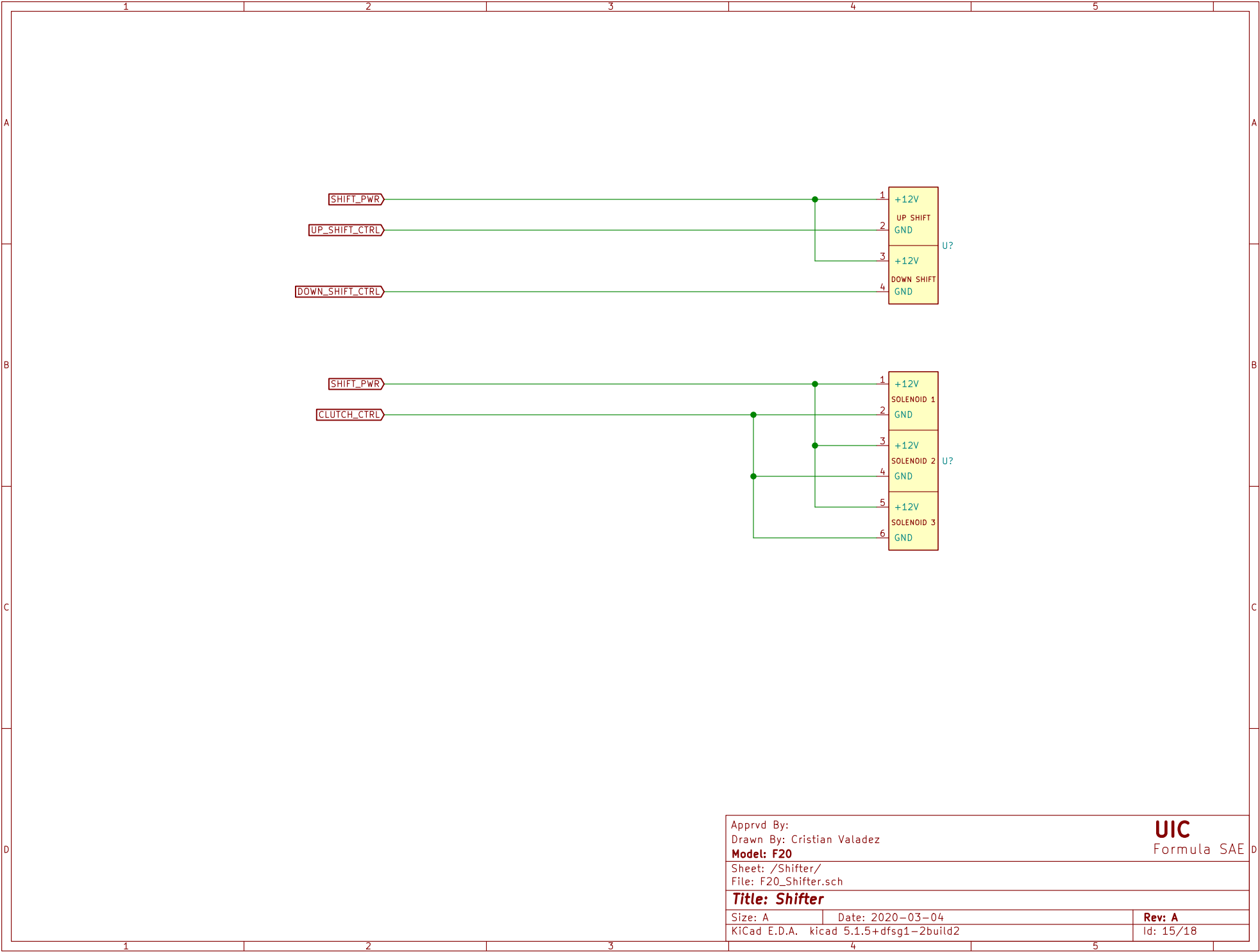
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Drawn By: Cristian Valadez
Model: F20
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File: F20_RIM.sch

Title: RIM

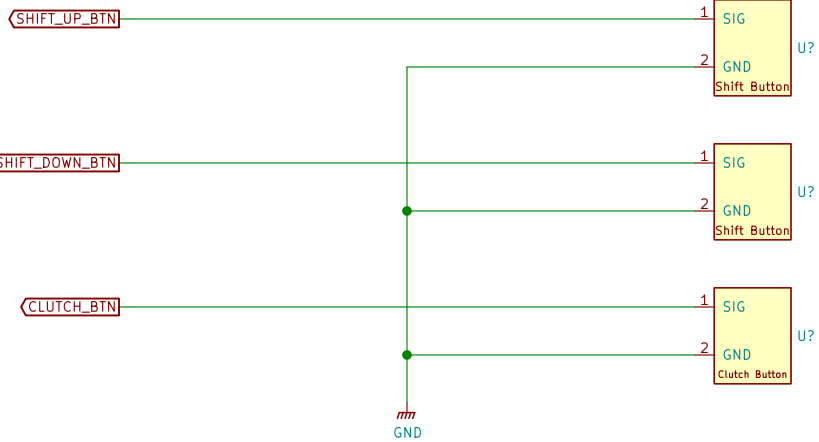
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UIC
Formula SAE D

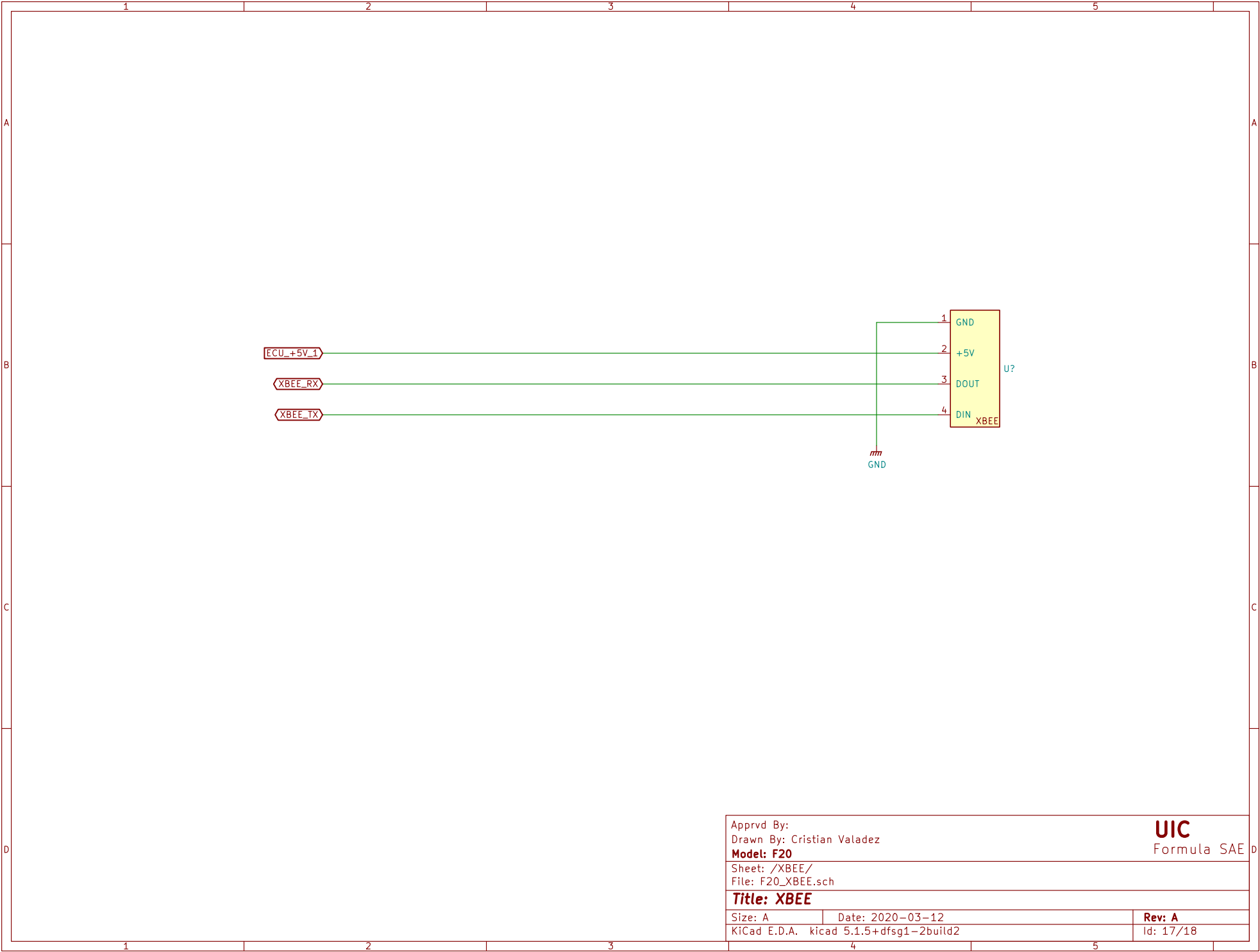
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Id: 14/18



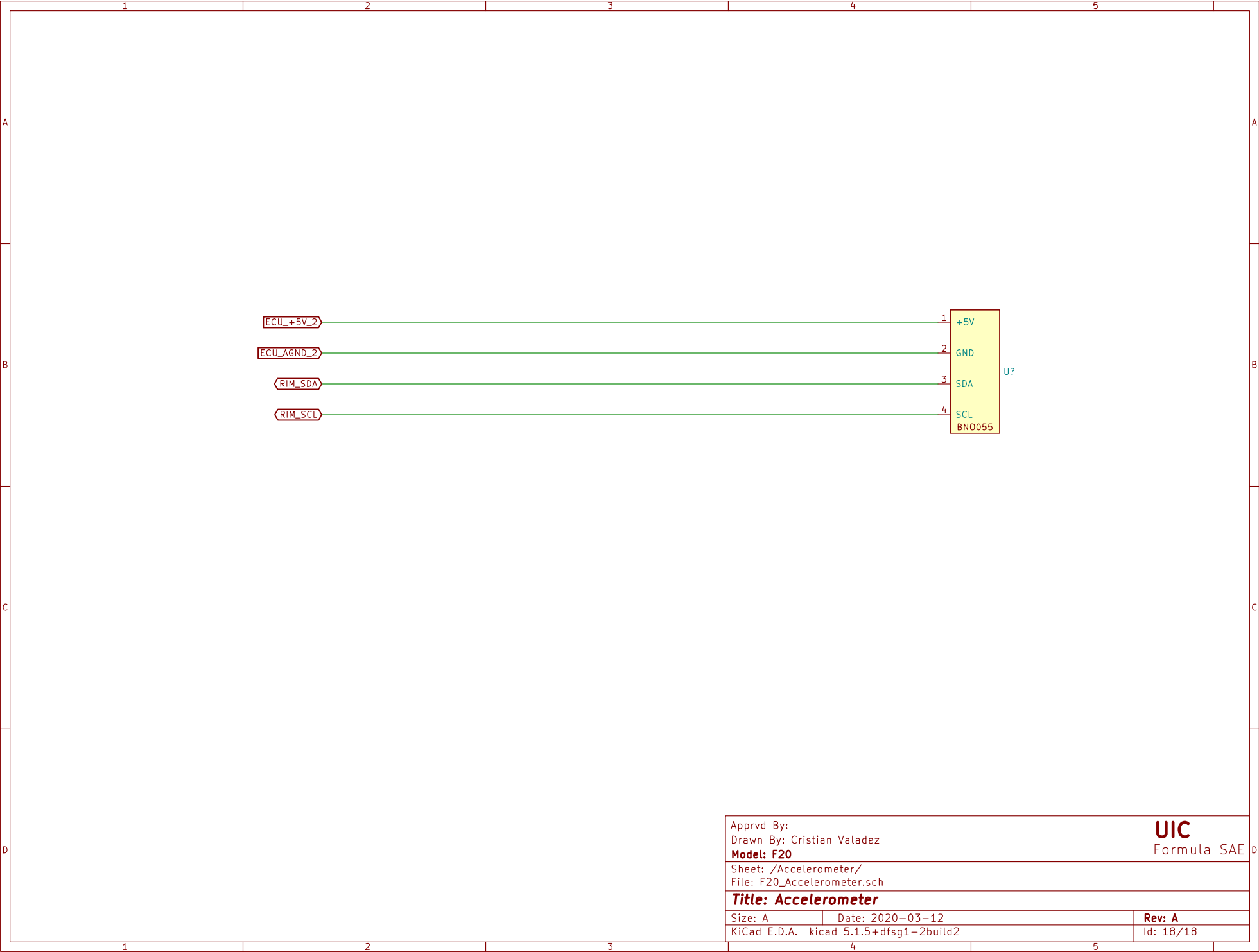
Apprvd By:		UIC	
Drawn By: Cristian Valadez		Formula SAE D	
Model: F20			
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Size: A	Date: 2020-03-04	Rev: A	
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Apprvd By:		UIC	
Drawn By: Alex Domagala		Formula SAE	
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Title: Steering Wheel			
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Apprvd By:		UIC
Drawn By: Cristian Valadez		
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Title: XBEE		
Size: A	Date: 2020-03-12	Rev: A
KiCad E.D.A. kicad 5.1.5+dfsg1-2build2		Id: 17/18



Apprvd By:		UIC Formula SAE
Drawn By: Cristian Valadez		
Model: F20		
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Title: Accelerometer		
Size: A	Date: 2020-03-12	Rev: A
KiCad E.D.A. kicad 5.1.5+dfsg1-2build2		Id: 18/18