Main connector to the car's electronics F2 Main_Conn1 D5 Conn_01x04 0.75A S524A These two take in the main 12V and output 3.3V and 5V for the internal components 12V Protected +5٧ L1_U4 D6 CANL This is the CAN transciever which takes the CANH and L differential signals and turns them into digital for the (CAN tx and rx) for the chip 4.7u U4 CANH S GND TPS562200 C13_U4 R8_U4 0.1u 54.9k CAN_TVS 12V Protected VBST C15_U4 C17_U4 C9_U4 C20_U3 C11_U4 R4_U4 VFB T0.1u 10k GND 22u R9_U4 MCP2562-E-MF GND 10k +3V3 CAN1_RX 4 TXD Conn_01x04 TEMP1 RXD CANH CANH \uparrow GND +3V3 CANL SHDN A SY This is the little 4-pin used to flash the microcontroller L2_U5 U5 4.7u TPS562200 C14_05 R10_U5 0.1u 33.2k \uparrow \rightarrow 12V Protected C10_U5 GND VBST C16_U5 C18_U5 GND C12_U5 R5_U5 3 SWDIO 15u VFB Conn_01x04 <u>∓</u>0.1u → GND R11_U5 22u 22u SW_Nidec_CAS-120A1 o SW2 SW1 SW_PúShT 😅 +3٧3 GND $\dot{\uparrow}$ GND +3∨3 🚓 🗗 \rightarrow R1_BOOT1 GND GND NRST ⇒PA0 10p 10k ⇒PA1 воото ⇒PA2 ⇒PA3 USB_5V J5 5 PH0 □ USB_B_Micro 6 PH1= ABM3-8.000MHZ-10-1-U-T1 Crystal_GND24 R1_USB1 54 PD2 ₹ 22R 8 PC0 = PC0 = PC1 = PC1 = PC1 = PC2 = PC1 = PC3 = PC5 = PC5 = PC5 = PC5 = PC5 = PC1 22R **□USB_OTG_FS_DM** R2_USB1 USB_OTG_FS_DP 45 =PA13_SWDIO 46 SWDIO 49 SWCLK =PA15 GNOND ⇒PB0 ⊲PB1 PB2 ⇒PB3 ⇒PB4 ⇒PB5 ⇒PB6 ⇒PB7 **⊐PB8** VCAP_1 ⇒SPI2_NSS 47 VCAP_2 0.1u C7_U1 ⇒SPI2_SCK ⊐PB11 $\dot{\rightarrow}$ ⇒CAN2_RX CAN1_RX GND **□CAN2_TX** CAN1_TX U1 STM32F405RGTx

GND