

[illegible][illegible][illegible]

The schematic is a detailed PCB layout for a custom board, centered around the STM32F405RGT6 microcontroller. The board is populated with various components, including integrated circuits, passive components, and connectors.

POWER: The power section includes a TPS562200DDCR (U3) and a TPS71733DCKR (U4). It features a +BATT input, a PWR_FLAG input, and a +5V output. The power section also includes a +3.3V output and a +5V output.

IMU: The IMU section includes an ICM-20648 (U5). It features a +3.3V input, a +3.3V output, and a +5V output. The IMU section also includes a +3.3V output and a +5V output.

Motor driver: The motor driver section includes a DRV8838DSGT (IC1). It features a +3.3V input, a +3.3V output, and a +5V output. The motor driver section also includes a +3.3V output and a +5V output.

IR_LED: The IR_LED section includes an IRF8209 (SL_D1, FR_D1, SR_D1, FL_D1). It features a +5V input, a +5V output, and a +5V output. The IR_LED section also includes a +5V output and a +5V output.

IR_RCV: The IR_RCV section includes an LTR-4206 (Q2, Q4, Q5, Q7). It features a +5V input, a +5V output, and a +5V output. The IR_RCV section also includes a +5V output and a +5V output.

Encoder: The encoder section includes a Conn_02x03_Odd_Even (J4, J5). It features a +5V input, a +5V output, and a +5V output. The encoder section also includes a +5V output and a +5V output.

UI: The UI section includes a LED_OSMT1608 (D3, D4, D5), a SW_MEC_5G (SW4), and a BUTTON. It features a +3.3V input, a +3.3V output, and a +5V output. The UI section also includes a +3.3V output and a +5V output.

STM32F405RGT6: The STM32F405RGT6 (U2) is the central microcontroller. It features a +3.3V input, a +3.3V output, and a +5V output. The STM32F405RGT6 section also includes a +3.3V output and a +5V output.

Other components: The schematic includes various other components, including resistors, capacitors, inductors, and connectors. These components are used to interface the microcontroller with the other components on the board.

The schematic is a detailed PCB layout for a custom board, centered around the STM32F405RGT6 microcontroller. The board is populated with various components, including integrated circuits, passive components, and connectors.

POWER: The power section includes a TPS562200DDCR (U3) and a TPS71733DCKR (U4). It features a +BATT input, a PWR_FLAG input, and a +5V output. The power section also includes a +3.3V output and a +5V output.

IMU: The IMU section includes an ICM-20648 (U5). It features a +3.3V input, a +3.3V output, and a +5V output. The IMU section also includes a +3.3V output and a +5V output.

Motor driver: The motor driver section includes a DRV8838DSGT (IC1). It features a +3.3V input, a +3.3V output, and a +5V output. The motor driver section also includes a +3.3V output and a +5V output.

IR_LED: The IR_LED section includes an IRF8209 (SL_D1, FR_D1, SR_D1, FL_D1). It features a +5V input, a +5V output, and a +5V output. The IR_LED section also includes a +5V output and a +5V output.

IR_RCV: The IR_RCV section includes an LTR-4206 (Q2, Q4, Q5, Q7). It features a +5V input, a +5V output, and a +5V output. The IR_RCV section also includes a +5V output and a +5V output.

Encoder: The encoder section includes a Conn_02x03_Odd_Even (J4, J5). It features a +5V input, a +5V output, and a +5V output. The encoder section also includes a +5V output and a +5V output.

UI: The UI section includes a LED_OSMT1608 (D3, D4, D5), a SW_MEC_5G (SW4), and a BUTTON. It features a +3.3V input, a +3.3V output, and a +5V output. The UI section also includes a +3.3V output and a +5V output.

STM32F405RGT6: The STM32F405RGT6 (U2) is the central microcontroller. It features a +3.3V input, a +3.3V output, and a +5V output. The STM32F405RGT6 section also includes a +3.3V output and a +5V output.

Other components: The schematic includes various other components, including resistors, capacitors, inductors, and connectors. These components are used to interface the microcontroller with the other components on the board.

The schematic is a detailed PCB layout for a custom board, centered around the STM32F405RGT6 microcontroller. The board is populated with various components, including integrated circuits, passive components, and connectors.

POWER: The power section includes a TPS562200DDCR (U3) and a TPS71733DCKR (U4). It features a +BATT input, a PWR_FLAG input, and a +5V output. The power section also includes a +3.3V output and a +5V output.

IMU: The IMU section includes an ICM-20648 (U5). It features a +3.3V input, a +3.3V output, and a +5V output. The IMU section also includes a +3.3V output and a +5V output.

Motor driver: The motor driver section includes a DRV8838DSGT (IC1). It features a +3.3V input, a +3.3V output, and a +5V output. The motor driver section also includes a +3.3V output and a +5V output.

IR_LED: The IR_LED section includes an IRF8209 (SL_D1, FR_D1, SR_D1, FL_D1). It features a +5V input, a +5V output, and a +5V output. The IR_LED section also includes a +5V output and a +5V output.

IR_RCV: The IR_RCV section includes an LTR-4206 (Q2, Q4, Q5, Q7). It features a +5V input, a +5V output, and a +5V output. The IR_RCV section also includes a +5V output and a +5V output.

Encoder: The encoder section includes a Conn_02x03_Odd_Even (J4, J5). It features a +5V input, a +5V output, and a +5V output. The encoder section also includes a +5V output and a +5V output.

UI: The UI section includes a LED_OSMT1608 (D3, D4, D5), a SW_MEC_5G (SW4), and a BUTTON. It features a +3.3V input, a +3.3V output, and a +5V output. The UI section also includes a +3.3V output and a +5V output.

STM32F405RGT6: The STM32F405RGT6 (U2) is the central microcontroller. It features a +3.3V input, a +3.3V output, and a +5V output. The STM32F405RGT6 section also includes a +3.3V output and a +5V output.

Other components: The schematic includes various other components, including resistors, capacitors, inductors, and connectors. These components are used to interface the microcontroller with the other components on the board.