





ICM-42688-P 6-Axis IMU GND GND VDD_3V3_SENS VDD_3V3_SENS U8 C33 C34 2.2uF ICM-42688-P VDD VDDIO C35 ICM42688_INT2_FIFO 9 INT2/FSYNC/CLKIN CICM42688_INT1_DRDY INT1/INT RESV_2 RESV_3 RESV_10 X \rightarrow RESV_10 GND SPI1_MISO 1 AP_SDO/AP_ADO RESV_11 RESV_7 GND GND **DPS310 Barometer BMI270 6-Axis IMU** VDD_3V3_SENS U9 VDD_3V3_SENS VDD_3V3_SENS DPS310 U7 VDDIO BMI270 VDD ___ C37 ___ C36 VDDIO 100nF T 100nF VDD I2C1_SCL I2C1_SDA SCK ____ C31 C32 SDI × 10 OSCB OSDO 11 X 100nF DPS310_INT1_DRDY BMI270_CS 12 CSB SDO R14 | SPI1_SCK | 13 | SCX | SPI1_MOSI | 14 | SDX | SPI1_MISO | 1 | SDO \rightarrow GND 10k GND × 3 ASCX - BMI270_INT1_DRDY GND GND X 2 ASDX 9 BMI270_INT2_DRDY INT2 GND GNDIO GND Sheet: /Sensors/ File: sensors.kicad_sch Title: Size: A4 Date: Rev: KiCad E.D.A. 9.0.1 ld: 4/7

MAX7456 OSD VDD_5V_OUT U10 MAX7456EUI_ GND VDD_5V_OUT EP C42 C43 C45 GND AVDD R16 100k DVDD PVDD VDD_5V_OUT Y2 OSD_CS **HSYNC** C40 R20 VSYNC RESET GND 22uF CLKIN CLKIN CLKIN CLKOUT R19 ☐ C39 22pF _ C38 SAG LOS 1k ± 22pF R18 1k SPI2_SCK 10 SCLK SPI2_MOSI 9 SDIN 11 SPI2_MISO SDOUT C41 R15^{100nF} 75 VOUT XFB CAM_IN > C44 100uF XFB 15 N.C. 16 N.C. 27 N.C. 28 N.C. AGND DGND PGND GND GND Sheet: /OSD/ File: osd.kicad_sch Title: Size: A4 Date: Rev: KiCad E.D.A. 9.0.1 ld: 5/7



