# Special cases:

- PCA9685 can use any address between 0x40 to 0x7F. Some of these addresses are fixed. See the <u>datasheet</u> for details. This chip is used in:
  - PWM/Servo Breakout
  - PWM/Servo Shield
  - PWM/Servo HAT
  - PWM/Servo Bonnet
  - 。 PWM/Servo Wing
  - o DC & Stepper Motor Shield
  - DC & Stepper Motor HAT
  - DC & Stepper Motor Bonnet
  - DC & Stepper Motor Wing
- 0x00 0x07 and 0x78 0x7F are reserved I2C addresses

# 0x00 - 0x0F

## 0x00

Reserved - general call address

## 0x01

Reserved for CBUS compatibility

## 0x02

• Reserved for I2C-compatible bus variants

### 0x03

Reserved for future use

### 0x04

Reserved for HS-mode controller

### 0x05

Reserved for HS-mode controller

Reserved for HS-mode controller

## 0x07

Reserved for HS-mode controller

### 0x0B

• <u>LC709203F Fuel Gauge and Battery Monitor</u> (0x0B only)

## 0x0C

MLX90393 3-Axis Magnetometer (0x0C - 0x0F)

#### 0x0D

MLX90393 3-Axis Magnetometer (0x0C - 0x0F)

## **OXOE**

- MAG3110 3-Axis Magnetometer (0x0E only)
- MLX90393 3-Axis Magnetometer (0x0C 0x0F)

## **OXOF**

• MLX90393 3-Axis Magnetometer (0x0C - 0x0F)

# 0x10 - 0x1F 0x10

- VEML6075 UV Sensor (0x10 only)
- VEML7700 Ambient Light Sensor (0x10 only)

## 0x11

• <u>Si4713 FM Transmitter with RDS</u> (0x11 or 0x63)

PMSA0031 Gas Sensor (0x12 only)

### 0x13

• VCNL40x0 Proximity Sensor (0x13 only)

## 0x18

- MCP9808 Temperature Sensor (0x18 0x1F)
- MPRLS Pressure Sensor (0x18)
- LIS331 3-Axis Accelerometer (0x18 or 0x19)
- LIS3DH 3-Axis Accelerometer (0x18 or 0x19)

## 0x19

- MCP9808 Temperature Sensor (0x18 0x1F)
- <u>LIS331 3-Axis Accelerometer</u> (0x18 or 0x19)
- LIS3DH 3-Axis Accelerometer (0x18 or 0x19)
- <u>LSM303 Accelerometer/Magnetometer</u> (0x19 for accelerometer and 0x1E for magnetometer)

## **AIXO**

- AGS02MA TVOC Gas Sensor (0x1A)
- MCP9808 Temperature Sensor (0x18 0x1F)

## 0x1B

• MCP9808 Temperature Sensor (0x18 - 0x1F)

## 0x1C

- <u>LIS3MDL Magetometer</u> (0x1C & 0x1E)
- MCP9808 Temperature Sensor (0x18 0x1F)
- MMA845x 3-Axis Accelerometer (0x1C or 0x1D)
- <u>FXOS8700 Accelerometer/Magnetometer</u> (0x1C, 0x1D, 0x1E or 0x1F)
- MMA7455L (0x1C or 0x1D)

## 0x1D

- ADXL343 3-Axis Accelerometer (0x1D or 0x53)
- ADXL345 3-Axis Accelerometer (0x1D or 0x53)
- <u>FXOS8700 Accelerometer/Magnetometer</u> (0x1C, 0x1D, 0x1E or 0x1F)
- LSM9DS0 9-Axis IMU (0x1D or 0x1E for Accel/Mag, 0x6A or 0x6B for Gyro)
- MCP9808 Temperature Sensor (0x18 0x1F)
- MMA7455L (0x1C or 0x1D)
- MMA845x 3-Axis Accelerometer (0x1C or 0x1D)

## 0x1E

- <u>FXOS8700 Accelerometer/Magnetometer</u> (0x1C, 0x1D, 0x1E or 0x1F)
- HMC5883 Magnetometer (0x1E only)
- <u>LIS2MDL Magnetometer</u> (0x1E only)
- LIS3MDL Magnetometer (0x1C & 0x1E)
- <u>LSM303 Accelerometer/Magnetometer</u> (0x19 for accelerometer and 0x1E for magnetometer)
- LSM9DS0 9-Axis IMU (0x1D or 0x1E for Accel/Mag, 0x6A or 0x6B for Gyro)
- MCP9808 Temperature Sensor (0x18 0x1F)

## 0x1F

- MCP9808 Temperature Sensor (0x18 0x1F)
- <u>FXOS8700 Accelerometer & Magnetometer</u> (0x1C, 0x1D, 0x1E or 0x1F)

# 0x20 - 0x2F <sub>0x20</sub>

- FXAS21002 Gyroscope (0x20 or 0x21)
- Chirp! Water Sensor (0x20)
- MCP23008 GPIO Expander (0x20 0x27)
- MCP23017 GPIO Expander (0x20 0x27)

- FXAS21002 Gyroscope (0x20 or 0x21)
- MCP23008 GPIO Expander (0x20 0x27)
- MCP23017 GPIO Expander (0x20 0x27)

- MCP23008 GPIO Expander (0x20 0x27)
- MCP23017 GPIO Expander (0x20 0x27)

### 0x23

- BH1750 Light Sensor (0x23 or 0x5C)
- MCP23008 GPIO Expander (0x20 0x27)
- MCP23017 GPIO Expander (0x20 0x27)

## 0x24

- MCP23008 GPIO Expander (0x20 0x27)
- MCP23017 GPIO Expander (0x20 0x27)

## 0x25

- MCP23008 GPIO Expander (0x20 0x27)
- MCP23017 GPIO Expander (0x20 0x27)

### 0x26

- MCP23008 GPIO Expander (0x20 0x27)
- MCP23017 GPIO Expander (0x20 0x27)
- MSA301 3-Axis Accelerometer (0x26 only)

## 0x27

- MCP23008 GPIO Expander (0x20 0x27)
- MCP23017 GPIO Expander (0x20 0x27)

- BNO055 IMU (0x28 or 0x29)
- CAP1188 8-Channel Capacitive Touch (0x28 0x2D)
- <u>DS1841 Digital Logarithmic Potentiometer</u> (0x28-0x2B)

- DS3502 Digital 10K Potentiometer (0x28-0x2B)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TSL2591 Light Sensor (0x29 and 0x28)

- BNO055 IMU (0x28 or 0x29)
- <u>DS1841 Digital Logarithmic Potentiometer</u> (0x28-0x2B)
- <u>DS3502 Digital 10K Potentiometer</u> (0x28-0x2B)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TCS34725 Color Sensor (0x29 only)
- TSL2561 Light Sensor (0x29, 0x39 or 0x49)
- TSL2591 Light Sensor (0x29 and 0x28)
- VL53L0x ToF Sensor (0x29, software selectable)
- VL6180X ToF Sensor (0x29)
- CAP1188 8-Channel Capacitive Touch (0x28 0x2D)

### 0x2A

- CAP1188 8-Channel Capacitive Touch (0x28 0x2D)
- <u>DS1841 Digital Logarithmic Potentiometer</u> (0x28-0x2B)
- DS3502 Digital 10K Potentiometer (0x28-0x2B)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)

## 0x2B

- CAP1188 8-Channel Capacitive Touch (0x28 0x2D)
- DS1841 Digital Logarithmic Potentiometer (0x28-0x2B)
- <u>DS3502 Digital 10K Potentiometer</u> (0x28-0x2B)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)

## 0x2C

- CAP1188 8-Channel Capacitive Touch (0x28 0x2D)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)

### 0x2D

- CAP1188 8-Channel Capacitive Touch (0x28 0x2D)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)

### 0x2E

 <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)

# 0x30 - 0x3F <sub>0x33</sub>

MLX90640 IR Thermal Camera (0x33 only)

### 0x36

Adafruit Stemma QT Rotary Encoder with NeoPixel (0x36 through 0x3D by using the jumpers on the back of the board)

## 0x38

- AHT20 Humidity/Temperature Sensor (0x38 only)
- DHT20 Humidity/Temperature Sensor (0x38 only)
- VEML6070 UV Index (0x38 and 0x39)
- <u>FT6x06 Capacitive Touch Driver</u> (0x38 only)
- NCP5623 RGB LED Driver

### 0x39

- AS7341 Color Sensor (0x39)
- <u>TSL2561 Light Sensor</u> (0x29, 0x39 or 0x49)
- VEML6070 UV Light Sensor (0x38 and 0x39)
- APDS-9960 IR/Color/Proximity Sensor (0x39 only)

### 0x3A

 PCF8577C LCD direct/duplex driver (0x3A only, with parallel adressing)

### 0x3C

All *OLED* controllers below use either 0x3C or 0x3D depending on a control pin. Hardware selectable on some displays with a solder jumper.

- SSD1305 Monochrome OLED (0x3C or 0x3D)
- SSD1306 Monochrome OLED (0x3C or 0x3D)
- SSD1309 Monochrome OLED (0x3C or 0x3D)
- SSD1315 Monochrome OLED (0x3C or 0x3D)
- SH1106 Monochrome OLED (0x3C or 0x3D)
- CH1115 Monochrome OLED (0x3C or 0x3D)
- CH1116 Monochrome OLED (0x3C or 0x3D)
- SSD1327 16-Level Grayscale OLED (0x3C or 0x3D)
- ST75256 4-Level Grayscale LCD (0x3C 0x3F)

### 0x3D

All *OLED* controllers below use either 0x3C or 0x3D depending on a control pin. Hardware selectable on some displays with a solder jumper.

- SSD1305 Monochrome OLED (0x3C or 0x3D)
- SSD1306 Monochrome OLED (0x3C or 0x3D)
- SSD1309 Monochrome OLED (0x3C or 0x3D)
- SSD1315 Monochrome OLED (0x3C or 0x3D)
- SH1106 Monochrome OLED (0x3C or 0x3D)
- CH1115 Monochrome OLED (0x3C or 0x3D)
- CH1116 Monochrome OLED (0x3C or 0x3D)
- SSD1327 16-Level Grayscale OLED (0x3C or 0x3D)
- ST75256 4-Level Grayscale LCD (0x3C 0x3F)

### 0x3E

ST75256 4-Level Grayscale LCD (0x3C - 0x3F)

## 0x3F

• ST75256 4-Level Grayscale LCD (0x3C - 0x3F)

# 0x40 - 0x4F

• PCA9685. See "Special Cases"

#### 0x40

- <u>Si7021 Humidity/Temperature Sensor</u> (0x40 only)
- HTU21D-F Humidity/Temperature Sensor (0x40 only)
- <u>HTU31D Humidity/Temperature Sensor</u> (0x40 or 0x41)
- HDC1008 Humidity/Temperature Sensor (0x40, 0x41, 0x42 or 0x43)
- <u>MS8607 Humidity/Temperature/Pressure Sensor</u> (0x40 for Humidity and 0x76 for Temperature/Pressure)
- TMP007 IR Temperature Sensor (0x40 0x47)
- TMP006 IR Temperature Sensor (0x40 0x47)
- PCA9685 16-Channel PWM Driver (default address) (0x40 0x7F)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)

### 0x41

- HDC1008 Humidity/Temperature Sensor (0x40, 0x41, 0x42 or 0x43)
- <u>HTU31D Humidity/Temperature Sensor</u> (0x40 or 0x41)
- TMP007 IR Temperature Sensor (0x40 0x47)
- TMP006 IR Temperature Sensor (0x40 0x47)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)
- STMPE610/STMPE811 Resistive Touch Controller (0x41 or 0x44)

## 0x42

- <u>HDC1008 Humidity/Temperature Sensor</u> (0x40, 0x41, 0x42 or 0x43)
- TMP007 IR Temperature Sensor (0x40 0x47)
- TMP006 IR Temperature Sensor (0x40 0x47)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)

### 0x43

• <u>HDC1008 Humidity/Temperature Sensor</u> (0x40, 0x41, 0x42 or 0x43)

- TMP007 IR Temperature Sensor (0x40 0x47)
- TMP006 IR Temperature Sensor (0x40 0x47)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)

- <u>SHT45 Humidity/Temperature Sensor</u> (0x44)
- SHT40 Humidity/Temperature Sensor (0x44)
- <u>SHT31 Humidity/Temperature Sensor</u> (0x44 or 0x45 selectable)
- TMP007 IR Temperature Sensor (0x40 0x47)
- TMP006 IR Temperature Sensor (0x40 0x47)
- ISL29125 Color Sensor (0x44 only)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)
- STMPE610/STMPE811 Resistive Touch controller (0x41 or 0x44)

### 0x45

- <u>SHT31 Humidity/Temperature Sensor</u> (0x44 or 0x45 selectable)
- TMP007 IR Temperature Sensor (0x40 0x47)
- TMP006 IR Temperature Sensor (0x40 0x47)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)

## 0x46

- TMP007 IR Temperature Sensor (0x40 0x47)
- TMP006 IR Temperature Sensor (0x40 0x47)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)

- TMP007 IR Temperature Sensor (0x40 0x47)
- TMP006 IR Temperature Sensor (0x40 0x47)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)

- ADS1115 4-channel 16-Bit ADC (0x48 0x49 0x4A or 0x4B)
- ADT7410 Temperature Sensor (0x48 0x49 0x4A or 0x4B)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)
- PCF8591 Quad 8-Bit ADC + 8-Bit DAC (0x48 0x4F)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- PN532 NFC/RFID reader (0x48 only)
- TMP102 Temperature Sensor (0x48 0x49 0x4A or 0x4B)
- TMP117 Temperature Sensor (0x48 0x49 0x4A or 0x4B)

## 0x49

- <u>ADS1115 4-Channel 16-Bit ADC</u> (0x48 0x49 0x4A or 0x4B)
- ADT7410 Temperature Sensor (0x48 0x49 0x4A or 0x4B)
- AS7262 Light/Color Sensor (0x49)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)
- PCF8591 Quad 8-Bit ADC + 8-Bit DAC (0x48 0x4F)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- <u>TSL2561 Light Sensor</u> (0x29, 0x39 or 0x49)
- TMP102 Temperature Sensor (0x48 0x49 0x4A or 0x4B)
- TMP117 Temperature Sensor (0x48 0x49 0x4A or 0x4B)

## 0x4A

- ADS1115 4-channel 16-Bit ADC (0x48 0x49 0x4A or 0x4B)
- ADT7410 Temperature Sensor (0x48 0x49 0x4A or 0x4B)
- <u>BNO085 9-DoF IMU</u> (0x4A or 0x4B)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)
- PCF8591 Quad 8-Bit ADC + 8-Bit DAC (0x48 0x4F)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TMP102 Temperature Sensor (0x48 0x49 0x4A or 0x4B)
- TMP117 Temperature Sensor (0x48 0x49 0x4A or 0x4B)

## 0x4B

- ADS1115 4-channel 16-Bit ADC (0x48 0x49 0x4A or 0x4B)
- ADT7410 Temperature Sensor (0x48 0x49 0x4A or 0x4B)
- <u>BNO085 9-DoF IMU</u> (0x4A or 0x4B)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)
- PCF8591 Quad 8-Bit ADC + 8-Bit DAC (0x48 0x4F)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TMP102 Temperature Sensor (0x48 0x49 0x4A or 0x4B)
- TMP117 Temperature Sensor (0x48 0x49 0x4A or 0x4B)

## 0x4C

- EMC2101 Fan Controller (0x4C)
- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)
- PCF8591 Quad 8-Bit ADC + 8-Bit DAC (0x48 0x4F)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x30-0x37, 0x48-0x4F)

## 0x4D

- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)
- PCF8591 Quad 8-Bit ADC + 8-Bit DAC (0x48 0x4F)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)

## 0x4E

- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)
- PCF8591 Quad 8-Bit ADC + 8-Bit DAC (0x48 0x4F)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)

### 0x4F

- INA219 High-Side DC Current/Voltage Sensor (0x40 0x4F)
- INA260 Precision DC Current/Power Sensor (0x40 0x4F)
- PCF8591 Quad 8-Bit ADC + 8-Bit DAC (0x48 0x4F)

<u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)

# 0x50 - 0x5F

- 24LCxx series EEPROMs of various sizes and makes
- PCA9685. See "Special Cases"

## 0x50

• MB85RC FRAM (0x50 - 0x57)

## 0x51

MB85RC FRAM (0x50 - 0x57)

## 0x52

- MB85RC FRAM (0x50 0x57)
- Nintendo Nunchuck Controller (0x52 only)

## 0x53

- ADXL343 3-Axis Accelerometer (0x1D or 0x53)
- ADXL345 3-Axis Accelerometer (0x1D or 0x53)
- <u>LTR390 UV Sensor</u> (0x53)
- MB85RC FRAM (0x50 0x57)

## 0x54

• MB85RC FRAM (0x50 - 0x57)

## 0x55

MB85RC FRAM (0x50 - 0x57)

## 0x56

• MB85RC FRAM (0x50 - 0x57)

- MB85RC FRAM (0x50 0x57)
- MAX3010x Pulse & Oximetry Sensor (0x57)

### 0x58

- AW9523 GPIO Expander and LED Driver (0x58 0x5B)
- TPA2016 Class-D Audio Amplifier (0x58 only)
- SGP30 Gas Sensor (0x58 only)

## 0x59

- AW9523 GPIO Expander and LED Driver (0x58 0x5B)
- SGP40 Gas Sensor (0x59 only)

## 0x5A

- AW9523 GPIO Expander and LED Driver (0x58 0x5B)
- MPR121 12-Point Capacitive Touch Sensor (0x5A, 0x5B, 0x5C, 0x5D)
- CCS811 VOC Sensor (0x5A or 0x5B)
- MLX9061x IR Temperature Sensor (0x5A only)
- DRV2605 Haptic Motor Driver (0x5A only)

## 0x5B

- AW9523 GPIO Expander and LED Driver (0x58 0x5B)
- MPR121 12-Point Capacitive Touch Sensor (0x5A, 0x5B, 0x5C, 0x5D)
- CCS811 VOC Sensor (0x5A or 0x5B)

## 0x5C

- AM2315 Humidity/Temp Sensor (0x5C only)
- AM2320 Humidity/Temp Sensor (0x5C only)
- BH1750 Light Sensor (0x23 or 0x5C)
- LPS22 Pressure Sensor (0x5C, 0x5D)
- <u>LPS25 Pressure Sensor</u> (0x5C, 0x5D)
- LPS33HW Ported Pressure Sensor (0x5C, 0x5D)
- LPS35HW Pressure Sensor (0x5C, 0x5D)

MPR121 12-Point Capacitive Touch Sensor (0x5A, 0x5B, 0x5C, 0x5D)

### 0x5D

- LPS22 Pressure Sensor (0x5C, 0x5D)
- LPS25 Pressure Sensor (0x5C, 0x5D)
- <u>LPS33HW Ported Pressure Sensor</u> (0x5C, 0x5D)
- <u>LPS35HW Pressure Sensor</u> (0x5C, 0x5D)
- MPR121 12-Point Capacitive Touch Sensor (0x5A, 0x5B, 0x5C, 0x5D)

## 0x5E

TLV493D 3-Axis Magnetometer (0x5E)

### 0x5F

HTS221 Humidity/Temperature Sensor (0x5F)

# 0x60 - 0x6F

• PCA9685. See "Special Cases"

## 0x60

- ATECC608 Cryptographic Co-Processor (0x60)
- MCP4728 Quad DAC (0x60 only)
- MCP9600 Temperature Sensor (0x60 0x67)
- MPL115A2 Barometric Pressure (0x60 only)
- MPL3115A2 Barometric Pressure (0x60 only)
- Si5351A Clock Generator (0x60 or 0x61)
- Sill45 Light/IR Sensor (0x60 only)
- MCP4725A0 12-Bit DAC (0x60 or 0x61)
- TEA5767 Radio Receiver (0x60 only)
- VCNL4040 Proximity and Ambient Light Sensor (0x60 only)

- MCP4725A0 12-Bit DAC (0x60 or 0x61)
- MCP9600 Temperature Sensor (0x60 0x67)

- Si5351A Clock Generator (0x60 or 0x61)
- SCD30 Humidity/Temperature/CO2 Sensor (0x61)

- MCP4725A1 12-Bit DAC (0x62 or 0x63)
- MCP9600 Temperature Sensor (0x60 0x67)

## 0x63

- MCP4725A1 12-Bit DAC (0x62 or 0x63)
- MCP9600 Temperature Sensor (0x60 0x67)
- <u>Si4713 FM Transmitter with RDS</u> (0x11 or 0x63)

### 0x64

- MCP4725A2 12-Bit DAC (0x64 or 0x65)
- MCP9600 Temperature Sensor (0x60 0x67)

## 0x65

- MCP4725A2 12-Bit DAC (0x64 or 0x65)
- MCP9600 Temperature Sensor (0x60 0x67)

## 0x66

- MCP4725A3 12-Bit DAC (0x66 or 0x67)
- MCP9600 Temperature Sensor (0x60 0x67)

## 0x67

- MCP4725A3 12-Bit DAC (0x66 or 0x67)
- MCP9600 Temperature Sensor (0x60 0x67)

### 0x68

This address is really popular with real time clocks, almost all of them use 0x68!

- AMG8833 IR Thermal Camera Breakout (0x68 or 0x69)
- <u>DS1307 RTC</u> (0x68 only)
- <u>DS3231 RTC</u> (0x68 only)

- ICM-20649 Accelerometer + Gyroscope (0x68 or 0x69)
- ITG3200 Gyroscope (0x68 or 0x69)
- MPU-9250 9-DoF IMU (0x68 or 0x69)
- MPU-60X0 Accelerometer + Gyroscope (0x68 or 0x69)
- PCF8523 RTC (0x68 only)

- AMG8833 IR Thermal Camera Breakout (0x68 or 0x69)
- ICM-20649 Accelerometer + Gyroscope (0x68 or 0x69)
- MPU-9250 9-DoF IMU (0x68 or 0x69)
- MPU-60X0 Accelerometer + Gyroscope (0x68 or 0x69)
- ITG3200 Gyroscope (0x68 or 0x69)

## 0x6A

- ICM330DHC 6-Axis IMU (0x6A or 0x6B)
- L3GD20H Gyroscope (0x6A or 0x6B)
- LSM6DS33 6-Axis IMU (0x6A or 0x6B)
- LSM6DSOX 6-Axis IMU (0x6A or 0x6B)
- LSM9DS0 9-Axis IMU (0x1D or 0x1E for Accel/Mag, 0x6A or 0x6B for Gyro)

## 0x6B

- ICM330DHC 6-Axis IMU (0x6A or 0x6B)
- L3GD20H Gyroscope (0x6A or 0x6B)
- LSM6DS33 6-Axis IMU (0x6A or 0x6B)
- LSM6DSOX 6-Axis IMU (0x6A or 0x6B)
- LSM9DS0 9-Axis IMU (0x1D or 0x1E for Accel/Mag, 0x6A or 0x6B for Gyro)

# 0x70 - 0x7F

 PCA9685 Shields, HATs, Breakouts, Wings etc - See "Special Cases"

## 0x70

• HT16K33 LED Matrix Driver (0x70 - 0x77)

- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TCA9548 1-to-8 I2C Multiplexer (0x70 0x77)
- SHTC3 Temp and Humidity Sensor (0x70)

- HT16K33 LED Matrix Driver (0x70 0x77)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TCA9548 1-to-8 I2C Multiplexer (0x70 0x77)

## 0x72

- HT16K33 LED Matrix Driver (0x70 0x77)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TCA9548 1-to-8 I2C Multiplexer (0x70 0x77)

## 0x73

- HT16K33 LED Matrix Driver (0x70 0x77)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TCA9548 1-to-8 I2C Multiplexer (0x70 0x77)

## 0x74

- HT16K33 LED Matrix Driver (0x70 0x77)
- <u>IS31FL3731 144-LED CharliePlex driver</u> (0x74 0x75 0x66 or 0x77)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TCA9548 1-to-8 I2C Multiplexer (0x70 0x77)

- HT16K33 LED Matrix Driver (0x70 0x77)
- <u>IS31FL3731 144-LED CharliePlex driver</u> (0x74 0x75 0x66 or 0x77)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)

• TCA9548 1-to-8 I2C Multiplexer (0x70 - 0x77)

### 0x76

- <u>BME280 Temp/Barometric/Humidity</u> (0x76 or 0x77)
- BME680 Temp/Barometric/Humidity/Gas (0x76 or 0x77)
- BMP280 Temp/Barometric (0x76 or 0x77)
- BMP388 Temp/Barometric (0x76 or 0x77)
- BMP390 Temp/Barometric (0x76 or 0x77)
- <u>DPS310 Barometric Sensor</u> (0x76 or 0x77)
- HT16K33 LED Matrix Driver (0x70 0x77)
- <u>IS31FL3731 144-LED CharliePlex driver</u> (0x74 0x75 0x66 or 0x77)
- MS5607/MS5611 Barometric Pressure (0x76 or 0x77)
- MS8607 Temp/Barometric/Humidity (0x40 for Humidity and 0x76 for Barometric/Temperature)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TCA9548 1-to-8 I2C Multiplexer (0x70 0x77)

### 0x77

- BMA180 Accelerometer (0x77 only)
- BME280 Temp/Barometric/Humidity (0x76 or 0x77)
- BME680 Temp/Barometric/Humidity/Gas (0x76 or 0x77)
- <u>BMP180 Temp/Barometric</u> (0x77 only)
- BMP085 Temp/Barometric (0x77 only)
- BMP280 Temp/Barometric (0x76 or 0x77)
- BMP388 Temp/Barometric (0x76 or 0x77)
- BMP390 Temp/Barometric (0x76 or 0x77)
- DPS310 Barometric Sensor (0x76 or 0x77)
- HT16K33 LED Matrix Driver (0x70 0x77)
- <u>IS31FL3731 144-LED CharliePlex driver</u> (0x74 0x75 0x66 or 0x77)
- MS5607/MS5611 Barometric Pressure (0x76 or 0x77)
- <u>PCT2075 Temperature Sensor</u> (0x28-0x2E, 0x48-0x4F, 0x70-0x77)
- TCA9548 1-to-8 I2C Multiplexer (0x70 0x77)

## 0x78

Reserved for 10-bit I2C addressing

• Reserved for 10-bit I2C addressing

## 0x7A

• Reserved for 10-bit I2C addressing

## 0x7B

• Reserved for 10-bit I2C addressing

## 0x7C

• Reserved for future purposes

## 0x7D

• Reserved for future purposes

## 0x7E

• Reserved for future purposes

## 0x7F

• Reserved for Future Purposes