

WUXGA OLED Communication ICD



These commands are sent over CMOS COM Port with 38400 Baud, 8 Data Bits, No Parity and 1 Stop bit (38400,8,N,1) to a UART, at 3.3v CMOS logic level.

COMMAND	SEND	RESPONSE
Command #1 OLED Register Read	6 Bytes Byte 1: "D" Byte 2: "M" Byte 3: "D" for OLED address 0x5E "O" for OLED address 0x5C Byte 4: "H" Byte 5: OLED register number (0x00 - 0x1F) Byte 6: "r" Example: "D" "M" "D" "H" 0x03 "r"	3 Bytes Byte 1: data from OLED Byte 2: 0x0A (Carriage Return) Byte 3: 0x0D (Line Feed)
Command #2 OLED Register Write	8 Bytes Byte 1: "D" Byte 2: "M" Byte 3: "D" for OLED address 0x5E "O" for OLED address 0x5C Byte 4: "H" Byte 5: OLED register number (0x00 - 0x1F) Byte 6: "J" Byte 7: Data to write to OLED register. Refer to OLED datasheet Byte 8: "W" Example: "D" "M" "D" "H" 0x02 "J" 0x20 "W"	None
Command #3 Read Gamma Coefficients	Byte 1: "F" Byte 2: "M" Loop (0 to 8) { Byte 1: "H" Byte 2: <Loop index> (0 to 8) Byte 3: "N" for OLED address 0x5E "d" for OLED address 0x5C wait for four data bytes }	9 of Four Data Bytes Four Data bytes: Byte 1: MSB Byte 2: LSB Byte 3: 0x0A(Carriage Return) Byte 4: 0x0D(Line Feed) data value = MSB * 256 + LSB

COMMAND	SEND	RESPONSE
<p>Command #4</p> <p>Write Gamma Coefficients</p>	<p>Byte 1: "F"</p> <p>Byte 2: "M"</p> <p>Loop (0 to 8)</p> <pre>{ Byte 1: "H" Byte 2: <Loop index> (0 to 8) Byte 3: "K" for OLED address 0x5E "A" for OLED address 0x5C Byte 4: MSB (MSB of Coefficient) Byte 5: LSB (LSB of Coefficient) }</pre> <p>Byte 3: "L"</p> <p>where: MSB = Coefficient value / 256 LSB = Coefficient value - (MSB * 256)</p>	<p>None</p>
<p>Command #5</p> <p>Enable Automatic Gamma</p>	<p>4 Bytes</p> <p>Byte 1: "O"</p> <p>Byte 2: "g"</p> <p>Byte 3: "A"</p> <p>Byte 4: Temperature Threshold (0x00-0xFF) 0x03 is recommended</p>	<p>None</p>
<p>Command #6</p> <p>Disable Automatic Gamma</p>	<p>4 Bytes</p> <p>Byte 1: "O"</p> <p>Byte 2: "g"</p> <p>Byte 3: "C"</p> <p>Byte 4: Temperature Threshold (0x00-0xFF) 0x03 is recommended</p>	<p>None</p>
<p>Command #7</p> <p>Write System Gamma</p>	<p>4 Bytes</p> <p>Byte 1: "D" for OLED address 0x5E "O" for OLED address 0x5C</p> <p>Byte 2: "n"</p> <p>Byte 3: MSB (MSB of x)</p> <p>Byte 4: LSB (LSB of x)</p> <p>where: x=100*System Gamma Value MSB = x / 256 LSB = x - (MSB * 256)</p>	<p>None</p>