

| | | Document / Project reference: AC Fan Speed Controller/Dimmer and Remote Unit | | PCB reference: STEVAL-IHM037V1 | | Date: 7-May-12 | | | |
|---|--------|---|--|-----------------------------------|--------------|--|----------|------------------------|----------|
| | | Company: STMicroelectronics | | | | | | | |
| Category | S. No. | Reference Designator | Component Description | Package | Manufacturer | Manufacturer's ordering code / Orderable Part Number | Supplier | Supplier Ordering Code | Quantity |
| Document / Project reference: BOM for the AC Fan Speed Controller/Dimmer | | | | | | | | | |
| ST Devices | 1 | U1 | STM8S003F3 Valueline series MCU | TSSOP-20 | ST | STM8S003F3P6 | | | 1 |
| | 2 | Q1 | Logic Level TRIAC | TO-220AB | ST | T435-600T | | | 1 |
| | 3 | Q2 | NPN Transistor | SOT-23 | ST | 2STR1160 | | | 1 |
| Other Devices | 1 | TSOP | IR Receiver 38KHZ ,DOME AXIAL | TSOP 2.54mm | Vishay | TSOP34838 | Digikey | 751-1386-5-ND | 1 |
| | 2 | D1 | Zener Diode 5V6/0.5W | SOD123 | Any | DDZ5V6B-7 | Digikey | DDZ5V6BDICT-ND | 1 |
| | 3 | D2 | LL4148 | SOD80 | Any | LLN4148 | Digikey | LL4148FSCT-ND | 1 |
| Capacitors | 1 | C1 | 470uF/16V Electrolytic | Radial 8mm Diameter / 3.5mm Pitch | Any | | Digikey | P5141-ND | 1 |
| | 2 | C2, C6,C7,C8 | 100nF Ceramic | SMD0805 | Any | | | | 4 |
| | 3 | C4 | 330nF or 680nF/310V AC X2 Rated Film Capacitor | 22.5mm Pitch | Any | | Digikey | BC1613-ND or BC2591-ND | 1 |
| | 4 | C5 | 100pF Ceramic | SMD0805 | Any | | | | 1 |
| | 5 | C9 | 470nF Ceramic | SMD0805 | Any | | | | 1 |
| Resistors | 1 | R1,R5 | 100R | SMD0805 | Any | | | | 2 |
| | 2 | R2 | 82E, 2W | Leaded | Yageo | RSF200JB-82R | Digikey | 82W-2-ND | 1 |
| | 3 | R3 | 330K/0.5W | Leaded | Any | | Digikey | PPC330KW-1CT-ND | 1 |
| | 4 | R4,R6 | 4K7 | SMD0805 | Any | | | | 2 |
| | 5 | R7 | 100K | SMD0805 | Any | | | | 1 |
| | 6 | R8 | 2K7 | SMD0805 | Any | | | | 1 |

| | | | | | | | | | |
|--|---|---|--|--|--------------------|--------------|---------|-------------------|---|
| Switches | 1 | SW1, SW2 | Push Button Switch Right Angle | SWITCH TACTILE SPST-NO 0.05A 12V | TT Electronics | SWT6-R6K | Digikey | 987-1385-ND | 2 |
| | | Notes : | | | | | | | |
| | | C4 X2 rating is important for reliable operation. A DC rated capacitor (even rated at 1000V DC) will fail over time as it is not designed to withstand the stress conditions present on AC supply lines. Use 330nF for 230V AC nominal supply voltage and increase to 680nF for 110V AC supply. | | | | | | | |
| Document / Project reference: BOM for the IR Remote Transmitter | | | | | | | | | |
| ST Devices | 1 | U1 | STM8L101 8-bit Low Power MCU | TSSOP-20 | ST | STM8L101F2P6 | | | 1 |
| | 2 | Q1 | PNP Transistor | SOT-23 | ST | 2STR2160 | | | 1 |
| Other Devices | 1 | IRLED | 940nm IR LED | 3mm through hole | Vishay | TSAL4400 | Digikey | 751-1201-ND | 1 |
| | 2 | BT1 | 3V CR2032 Battery Retainer | | Protection Devices | BK-833 | Digikey | BHSD-2032-SMCT-ND | 1 |
| Capacitors | 1 | C1 | 100nF Ceramic | SMD0805 | Any | | | | 1 |
| Resistors | 1 | R1 | 2K7 | SMD0805 | Any | | | | 1 |
| | 2 | R2 | 22R | SMD0805 | Any | | | | 1 |
| Switches | 1 | SW1, SW2, SW3 | Carbon Contact Push Button Switch on PCB | ENIG Gold Plated Carbon Contact Switch (PCB) | | | | | 3 |
| Enclosure | 1 | N/A | BOSS 3 button Key FOB enclosure | Enclosure | Boss Enclosures | 2955-20R-3 | Farnell | 1264656 | 1 |
| | | Notes : | | | | | | | |
| | | SW1, SW2, SW3 are carbon contact footprints on PCB while the actual carbon contact is integrated into the enclosure. Alternately 2 pin tactile SMD switch from MULTICOMP part no. DTSM-32S-B can be used on the same footprint. | | | | | | | |
| End of File | | | | | | | | | |