

PMP7755

PMP7755 BOM

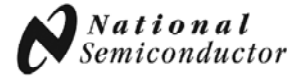


Literature Number:SNVR010

Engineering Bill of Materials

Date opened: 3/30/2010
Time opened: 8:42:19 AM

| | |
|-------------------|-------------------------|
| Project Name: | Garage Light LED Driver |
| Project File: | NSC1042.PrjPCB |
| Base ID: | xxxxxx |
| PCB Revision: | -001 REV A |
| Assembly Variant: | NSC1042 w/ PIR Dimming |
| Schematic Rev: | X1 |
| Build Quantity: | 1 |
| Generated: | 3/23/2010 2:28:55 PM |



PCB Part Number: 551xxxxxx-001 REV A

| Item | Designator | CompType | Value | PackageReference | Description | RoHS | Manufacturer | PartNumber | Library Name | LibRef |
|------|------------|--------------------|-------|--------------------|--|--------|-----------------------------|---------------------|--------------------------|---------------------|
| 1 | AA1 | PCB | | N/A | Printed Circuit Board | O | TBD | | MiscParts.IntLib | PCB |
| 2 | C100 | Capacitor | 10uF | 2220 | CAP, CERM, 10uF, 50V, +/-20%, X7R, 2220 | Y | TDK | C5750X7R1H106M | Capacitor_Ceramic.IntLib | C5750X7R1H106M |
| 3 | C101 | Capacitor | 1uF | 0805 | CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805 | Y | MuRata | GRM21BR71H105KA12L | Capacitor_Ceramic.IntLib | GRM21BR71H105KA12L |
| 4 | C102 | Capacitor | 1uF | 0805 | CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805 | Y | MuRata | GRM21BR71H105KA12L | Capacitor_Ceramic.IntLib | GRM21BR71H105KA12L |
| 5 | C103 | Capacitor | 10uF | 2220 | CAP, CERM, 10uF, 50V, +/-20%, X7R, 2220 | Y | TDK | C5750X7R1H106M | Capacitor_Ceramic.IntLib | C5750X7R1H106M |
| 6 | C105 | Capacitor | 1uF | 1825 | CAP, CERM, 1uF, 50V, +/-10%, X7R, 1825 | Y | AVX | 1825C105KAT2A | Capacitor_Ceramic.IntLib | 1825C105KAT2A |
| 7 | C106 | Capacitor | 470pF | 0805 | CAP, CERM, 470pF, 50V, +/-10%, X7R, 0805 | Y | Vishay-Bccomponents | VJ0805Y471KXACW1BC | Capacitor_Ceramic.IntLib | VJ0805Y471KXACW1BC |
| 8 | C300 | Capacitor | 10uF | 1210 | Ceramic, X7R, 25V, 20% | Y | TDK | C3225X7R1E106M | Capacitor_Ceramic.IntLib | C3225X7R1E106M |
| 9 | C301 | Capacitor | 1uF | 1206 | Ceramic, X7R, 25V, 10% | Y | TDK | C3216X7R1E105K/0.85 | Capacitor_Ceramic.IntLib | C3216X7R1E105K/0.85 |
| 10 | C302 | Capacitor | 1uF | 1210 | Ceramic, X7R, 50V, 10% | Y | MuRata | GRM32RR71H105KA01L | Capacitor_Ceramic.IntLib | GRM32RR71H105KA01L |
| 11 | C303 | Capacitor | 22uF | | CAP, [Technology], xxxF, xxV, +/-xx%, xxOhm ESR, [MountType] | Report | SUNCON | 63HVP22M | MiscParts.IntLib | Capacitor_Polarized |
| 12 | D101 | Diode | 0.7V | SMC | Vr = 60V, Io = 5A, Vf = 0.7V | Y | Diodes Inc. | B560C-13-F | Diode.IntLib | B560C-13-F |
| 13 | D300 | | | | Schottky Diode | | | | NationalSch.SCHLIB | DIODE-BAT54 |
| 14 | GND | Hole for probe tip | | | 40 mil hole | | | | Mechanical.SchLib | 40 mil hole |
| 15 | H7 | Hardware | | Standoff | Standoff, Hex, 0.5"L #4-40 Nylon | Y | Keystone | 1902C | Connectors.IntLib | 1902C |
| 16 | L100 | Inductor | 33uH | Used in BOM report | Technology, Imax, DCR | Report | Würth | 74435573300 | MiscParts.IntLib | Inductor |
| 17 | LED+ | Hole for probe tip | | | 40 mil hole | | | | Mechanical.SchLib | 40 mil hole |
| 18 | LED- | Hole for probe tip | | | 40 mil hole | | | | Mechanical.SchLib | 40 mil hole |
| 19 | P301/PIR | | | | TEST POINT | | | | NationalSch.SCHLIB | PAD175 |
| 20 | Q100 | MOSFET | -40V | DPAK | MOSFET, P-CH, -40V, -12A, DPAK | Y | Alpha & Omega Semiconductor | AOD413A | FETs.IntLib | AOD413A |
| 21 | Q101 | MOSFET | -40V | DPAK | MOSFET, P-CH, -40V, -12A, DPAK | Y | Alpha & Omega Semiconductor | AOD413A | FETs.IntLib | AOD413A |
| 22 | Q300 | MOSFET | 60V | SOT-23 | 0.26A, 0.81nC, rDS(on) @ 4.5V =3 ohm | Y | ON Semiconductor | 2N7002ET1G | FETs.IntLib | 2N7002ET1G |
| 23 | Q301 | MOSFET | 60V | SOT-23 | 0.26A, 0.81nC, rDS(on) @ 4.5V =3 ohm | Y | ON Semiconductor | 2N7002ET1G | FETs.IntLib | 2N7002ET1G |
| 24 | R101 | Resistor | 49.9k | 0805 | 1%, 0.125W | Y | Vishay-Dale | CRCW080549K9FKEA | Resistor_0805.IntLib | CRCW080549K9FKEA |
| 25 | R104 | Resistor | 0.05 | 2512 | 1%, 1W | Y | Vishay-Dale | WSL2512R0500FEA | Resistor_OtherSMT.IntLib | WSL2512R0600FEA |
| 26 | R107 | Resistor | 6.98k | 0805 | 1%, 0.125W | Y | Vishay-Dale | CRCW08056K98FKEA | Resistor_0805.IntLib | CRCW08056K98FKEA |
| 27 | R108 | Resistor | 0 | 0805 | 5%, 0.125W | Y | Vishay-Dale | CRCW08050000Z0EA | Resistor_0805.IntLib | CRCW08050000Z0EA |
| 28 | R109 | Resistor | 15.4k | 0805 | 1%, 0.125W | Y | Vishay-Dale | CRCW080515K4FKEA | Resistor_0805.IntLib | CRCW080515K4FKEA |
| 29 | R110 | Resistor | 0 | 0805 | RES, 0 ohm, 5%, 0.125W, 0805 | Y | Vishay-Dale | CRCW08050000Z0EA | Resistor_0805.IntLib | CRCW080530K1FKEA |
| 30 | R111 | Resistor | 0 | 0805 | 5%, 0.125W | Y | Vishay-Dale | CRCW08050000Z0EA | Resistor_0805.IntLib | CRCW08050000Z0EA |
| 31 | R112 | Resistor | 10.0k | 0805 | 1%, 0.125W | Y | Vishay-Dale | CRCW080510K0FKEA | Resistor_0805.IntLib | CRCW080510K0FKEA |
| 32 | R300 | Resistor | 10.0k | 0805 | 1%, 0.125W | Y | Vishay-Dale | CRCW080510K0FKEA | Resistor_0805.IntLib | CRCW080510K0FKEA |
| 33 | R301 | Resistor | 169k | 0805 | RES, 169k ohm, 0.1%, 0.125W, 0805 | Y | Yageo America | RT0805BRD07169KL | Resistor_0805.IntLib | CRCW0805100KFEA |

| Item | Designator | CompType | Value | PackageReference | Description | RoHS | Manufacturer | PartNumber | Library Name | LibRef |
|------|------------|--------------------|--------|------------------|---------------------------------|------|------------------------|------------------|----------------------|------------------|
| 34 | R302 | Resistor | 10.0k | 0805 | 1%, 0.125W | Y | Vishay-Dale | CRCW080510K0FKEA | Resistor_0805.IntLib | CRCW080510K0FKEA |
| 35 | R303 | Resistor | 169k | 0805 | RES, 169k ohm, 1%, 0.125W, 0805 | Y | Vishay-Dale | CRCW0805169KFKEA | Resistor_0805.IntLib | CRCW0805100KFKEA |
| 36 | R304 | Resistor | 909k | 0805 | RES, 909k ohm, 1%, 0.125W, 0805 | Y | Panasonic | ERJ-6ENF9093V | Resistor_0805.IntLib | CRCW0805909KFKEA |
| 37 | R305 | Resistor | 0 | 0805 | 5%, 0.125W | Y | Vishay-Dale | CRCW08050000Z0EA | Resistor_0805.IntLib | CRCW08050000Z0EA |
| 38 | R306 | Resistor | 10.0k | 0805 | 1%, 0.125W | Y | Vishay-Dale | CRCW080510K0FKEA | Resistor_0805.IntLib | CRCW080510K0FKEA |
| 39 | R307 | Resistor | 10.0k | 0805 | 1%, 0.125W | Y | Vishay-Dale | CRCW080510K0FKEA | Resistor_0805.IntLib | CRCW080510K0FKEA |
| 40 | R308 | Resistor | 100k | 0805 | RES, 100k ohm, 1%, 0.125W, 0805 | Y | Vishay-Dale | CRCW0805100KFKEA | Resistor_0805.IntLib | CRCW0805100KFKEA |
| 41 | R309 | | | | Variable Resistor | | | | NationalSch.SCHLIB | Resistor |
| 42 | R310 | Resistor | 10.0k | 0805 | 1%, 0.125W | Y | Vishay-Dale | CRCW080510K0FKEA | Resistor_0805.IntLib | CRCW080510K0FKEA |
| 43 | R311 | | | | Variable Resistor | | | | NationalSch.SCHLIB | Resistor |
| 44 | R312 | | | | Variable Resistor | | | | NationalSch.SCHLIB | Resistor |
| 45 | U100 | Controller | | | PFET Buck Controller | | National Semiconductor | LM3409MY | Johnlibs.SchLib | LM3409 |
| 46 | U101 | OpAmp IC | LM358M | M08A_L | Low Power Dual Op Amp | O | National Semiconductor | LM358M | NSC Amplifier.IntLib | LM358M |
| 47 | U300 | | | | 3 Terminal Regulator | | | | | LM78L05 |
| 48 | VIN=24V | Hole for probe tip | | | 40 mil hole | | | | Mechanical.SchLib | 40 mil hole |

Manually enter information below for items not included in schematics. i.e. shunts, sockets, screws, cables, etc.

| Item | Designator | CompType | Value | PackageReference | Description | RoHS | Manufacturer | PartNumber |
|------|------------|----------|-------|------------------|-------------|------|--------------|------------|
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