

Bill of materials for Group 3, Voice Recognition
Source file: VoiceRecognitionGroup.sch
Last modified November 3rd 2018

PCB Version: 1.0

BOM Version: 1.0

P/DNP = Place/ Do not place component
 Comments: All components are SMD unless otherwise noted

| Qty | Value | Parts | P/DNP | Mfg |
|------------|---------------------|-----------------|--------------|------------|
| 1 | PWR-BLU | LED1 | P | Dialight |
| 1 | FUNC_GRN | LED2 | P | Dialight |
| 1 | NOFUNC_RED | LED3 | P | Dialight |
| 1 | WARN_YELL | LED4 | P | Dialight |
| 2 | MIC_ON, RESET1 | Buttons | P | Panasonic |
| 8 | 100nF | C4, C6, C8, C12 | P | Murata |
| 2 | 10k | R4, R8 | P | Welwyn |
| 1 | 10uF | C5, C7 | P | Murrata |
| 1 | 16MHz | Q1 | P | NDK |
| 2 | 18pF | C1, C2 | P | Murata |
| 4 | 1k | R3, R5, R6, R7 | P | KOA Speer |
| 1 | 1uF | C3 | P | KEMET |
| 2 | 22 | R1, R2 | P | Welwyn |
| 1 | 5.5x2.1mm Barrel | J1 | P | Adam Tech. |
| 1 | ATMEGA32U4-AU | U\$1 | P | Microchip |
| 1 | USB-A | X1 | P | CUI |
| 1 | DC Wall Wart | N/A | DNP | NLPOWER-CN |
| 1 | USB-A Cable 2 pack | N/a | DNP | DTOL |
| 1 | 120 Pack cables | N/A | DNP | Elegoo |
| 1 | Misc Connectors EPL | N/A | DNP | EPL-PSU |

Version Changes: Initial BOM

on Project ource File

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rwise noted

| Mfg Part # | Device Description | Distributor |
|--------------------------|---|-------------|
| 597-6601-607F | 1206 Blue LED | Mouser |
| 599-0281-007F | 1206 Green LED | Mouser |
| 597-6001-607F | 1206 Red LED | Mouser |
| 597-6401-607F | 1206 Yellow LED | Mouser |
| 667-EVQ-Q2K01W | Tactile button 6mm square | Mouser |
| GRM31C5C2A104JA01L | 100nF 100VDC 5% 1206 Capacitor | Mouser |
| WIN-T1206LF-03-1002-B | 10k 1% 250mW 1206 resistor | Mouser |
| GCJ31CC71E106MA15L | 10uF 25VDC 20% 1206 Capacitor | Mouser |
| NX3225SA-16.000000MHZ-T1 | 16MHz Surface Mount 10ppm | Mouser |
| GRM31A7U3D180JW31D | 18pF 2kVDC 5% 1206 Capacitor | Mouser |
| RN73H2BTDD1001F100 | 1k 1% 250mW 1206 resistor | Mouser |
| C1206X105M3RACTU | 1uF 25VDC 20% 1206 Capacitor | Mouser |
| WCR1206-22RFI | 22 1% 250mW 1206 resistor | Mouser |
| Unknown | Barrel Jack Female 5.5mm jack, 2.1mm center pole diameter | Sparkfun |
| ATMEGA32U4-AU | ATMEGA32U4-AU | Mouser |
| UJ2-AH-1-SMT-TR | USB-A | Mouser |
| SFE-5V2AD | DC Wall wart 5.5mmx2.1mm 5v, 2A | Sparkfun |
| Unknown | USB-A Male to Male 4ft cable | Amazon |
| Unknown | MI to MI, Fm to MI, Fm to Fm Connectors | Amazon |
| Unknown | Miscellaneous Headers from EPL Store | EPL |



| Dist. Part # | Price per unit | Ext. Price |
|----------------------|-----------------------|-------------------|
| 645-597-6601-607F | 0.9 | 0.9 |
| 645-599-0281-007F | 0.51 | 0.51 |
| 645-597-6001-607F | 0.72 | 0.72 |
| 645-597-6401-607F | 0.72 | 0.72 |
| 667-EVQ-Q2K01W | 0.3 | 0.6 |
| 81-GRM31C5C2A104JA1L | 0.71 | 5.68 |
| 66-WINT1206LF031002B | 0.59 | 1.18 |
| 81-GCJ31CC71E106MA5L | 0.94 | 0.94 |
| 344-NX3225SA16MHZT1 | 0.92 | 0.92 |
| 81-GRM31A7U3D180JW1D | 0.74 | 1.48 |
| 660-RN73H2BT1001F100 | 0.44 | 1.76 |
| 80-C1206X105M3R | 1.36 | 1.36 |
| 756-WCR1206-22RFI | 0.1 | 0.2 |
| PRT-12748 | 1.5 | 1.5 |
| 556-ATMEGA32U4-AU | 4.12 | 4.12 |
| 490-UJ2-AH-1-SMT-TR | 1.28 | 1.28 |
| TOL-12889 | 5.95 | 5.95 |
| link | 8.2 | 8.2 |
| link | 6.98 | 6.98 |
| | 3 | 3 |
| Total Cost: | | 48 |



Notes

Only 1 bundled need for all 4 boards

