Instituto Federal da Paraíba - IFPB

Disciplina: Técnicas de Prototipagem
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I. Objetivo

O objetivo do projeto consiste em fazer um Kit utilizando o Franzininho e mais alguns componentes eletrônicos aplicando os conhecimentos desenvolvidos ao longo da disciplina.

II. Softwares Utilizados

Fusion 360.

III. Lista de Componentes

| Part | Value | Device | Package | Description | |
|------------|-----------------|------------------------|----------------------------|---|--|
| D1 | | LED_RADIALG REEN | LEDRD254W60D56 5H860B_G | LED - Generic | |
| D2 | | LED_RADIALG REEN | LEDRD254W60D56 5H860B_G | LED - Generic | |
| D3 | | LED_RADIALG REEN | LEDRD254W60D56 5H860B_G | LED - Generic | |
| D4 | | LED_RADIALG REEN | LEDRD254W60D56 5H860B_G | LED - Generic | |
| D5 | | LED_RADIALG REEN | LEDRD254W60D56 5H860B_G | LED - Generic | |
| D6 | | LED_RADIALG REEN | LEDRD254W60D56 5H860B_G | LED - Generic | |
| D7 | | LED_RADIALG REEN | LEDRD254W60D56 5H860B_G | LED - Generic | |
| D8 | | LED_RADIALG REEN | LEDRD254W60D56 5H860B_G | LED - Generic | |
| D9 | DIODE | DIODEDO-214 AB(SMC) | DIOM7959X625N | Diode Rectifier - Generic | |
| DS1 | 7SEG-CA | 7SEG-CA | 7SEG-13 | 7-segment DISPLAY | |
| DS2 | 7SEG-CA | 7SEG-CA | 7SEG-13 | 7-segment DISPLAY | |
| FRANZ 1 | FRANZININH O | FRANZININHO | FRANZININHO | | |
| J1 | 694108106102 | 694108106102 | 694108106102 | WR-DC DC Power Jack Right Angled SMT Ø 6.4 with 4 soldering pads & pegs | |
| JP1 | PINHD-1X6 | PINHD-1X6 | 1X06 | PIN HEADER | |
| JP2 | PINHD-1X10 | PINHD-1X10 | 1X10 | PIN HEADER | |

| LS1 | AI-1223-TWT- 5V-R | AI-1223-TWT-5 V-R | XDCR_AI-1223-TW T-5V-R | Check availability | |
|-----|----------------------|----------------------------|---------------------------|-----------------------|--|
| Q1 | NPN | NPN_TO18-EB | TO18 | NPN - Generic | |
| Q2 | NPN | NPN_TO18-EB | TO18 | NPN - Generic | |
| Q3 | NPN | NPN_TO18-EB | TO18 | NPN - Generic | |
| R1 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R2 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R3 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R4 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R5 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R6 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R7 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R8 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R9 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R10 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R11 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R12 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R13 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R14 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R15 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R16 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R17 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R18 | 350 | R-US_AXIAL-7. | RESAD724W46L38 | Resistor Fixed - ANSI | |

| | | 2MM-PITCH | 1D178B | | |
|------|--------------------------|----------------------------|--------------------------|---|--|
| R19 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R20 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R21 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R22 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R23 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R24 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| R25 | 350 | R-US_AXIAL-7. 2MM-PITCH | RESAD724W46L38 1D178B | Resistor Fixed - ANSI | |
| U\$1 | DISPLAY240X 240IPSTFT | DISPLAY240X2 40IPSTFT | TFT | | |
| U\$2 | 2828XX-32828 37-3 | 2828XX-328283 7-3 | TERMBLK_508-3N | 3 Position Wire to Board Terminal Block Horizontal with Board | |
| U\$3 | 2828XX-32828 37-3 | 2828XX-328283 7-3 | TERMBLK_508-3N | 3 Position Wire to Board Terminal Block Horizontal with Board | |
| U\$4 | 2828XX-32828 37-3 | 2828XX-328283 7-3 | TERMBLK_508-3N | 3 Position Wire to Board Terminal Block Horizontal with Board | |
| U\$5 | 2828XX-42828 37-4 | 2828XX-428283 7-4 | TERMBLK_508-4N | 4 Position Wire to Board Terminal Block Horizontal with Board | |
| U\$6 | 2828XX-42828 37-4 | 2828XX-428283 7-4 | TERMBLK_508-4N | 4 Position Wire to Board Terminal Block Horizontal with Board | |
| U\$7 | PROTOBOAR D | PROTOBOARD | PROTOBOARD | | |
| U1 | 1-1825910-0 | 1-1825910-0 | SWITCH_1-1825910 -0 | | |
| U2 | 1-1825910-0 | 1-1825910-0 | SWITCH_1-1825910 -0 | | |
| U3 | 1-1825910-0 | 1-1825910-0 | SWITCH_1-1825910 -0 | | |
| U4 | 1-1825910-0 | 1-1825910-0 | SWITCH_1-1825910 -0 | | |
| U5 | 1-1825910-0 | 1-1825910-0 | SWITCH_1-1825910 -0 | | |
| U6 | 1-1825910-0 | 1-1825910-0 | SWITCH_1-1825910 -0 | | |

IV. Imagens do Protótipo





