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|--------------|------------|-----------------------------|-----------------------------|------------------------------------|------------------------------------|---|---|----------------------|---|---------------|---------|------------|---|----------------------|----------------------------------|-----------------------------|
| Order Date | 10/12/2021 | Part Number | 4060052 | Item Name | Thrustmaster Ferrari Red Legend Ra | Location to Buy From | https://www.walmart.com/ip/R | Cost per Part | \$59.99 | Quantity | 1 | Total Cost | \$59.99 | Item Description | Set of steering wheel and pedals | |
| | | | | | | | | Simulator Order Cost | | | 1 | \$59.99 | (already ordered, do not order again) | | | |
| MCU | | | | | | | | | | | | | | | | |
| Order Date | 10-18-21 | Part Number | PIC32MZ2025DAA176T-IJ2TR-ND | Item Name | PIC32MZ2025DAA176T Microcontro | Location to Buy From | https://www.digikey.com/en/pr | Cost per Part | \$18.42 | Quantity | 1 | Total Cost | \$18.41 | Item Description | IC MCU 32BIT 2MB FLASH 176LQFP | |
| | | LFXTAL069944REEL | | LFXTAL069944REEL Oscillator | | https://www.digikey.com/en/pr | | \$0.74 | | 1 | | \$0.74 | 12 MHz ±20ppm Crystal 15pF 120 Ohms 4-SMD, No Lead | | | |
| | | CP374 | | Comidox 1PCS PICKit3 Electronic Ch | | https://www.amazon.com/Cor | | \$16.99 | | 1 | | \$16.99 | Original MPLAB PICKit 3 PIC Microcontroller Chip in-Circuit Debugger Programmer | | | |
| | | PQME1-S5-S3-M | | PQME1-S5-S3-M DCDC Converter | | https://www.digikey.com/en/pr | | \$4.41 | | 1 | | \$4.41 | Isolated Module DC DC Converter 1 Output 3.3V --- 200mA 4.75V - 5.25V Input | | | |
| | | XCL210C181GR-G | | XCL210C181GR-G DCDC Converter | | https://www.digikey.com/en/pr | | \$2.74 | | 1 | | \$2.74 | Non-Isolated Pol. Module DC DC Converter 1 Output 1.8V --- 200mA 2V - 6V Input | | | |
| | | TMR1-0511SM-ND | | TMR1-0511SM-ND DCDC Converter | | https://www.digikey.com/en/pr | | \$13.24 | | 1 | | \$13.24 | Isolated Module DC DC Converter 1 Output 5V --- 200mA 4.5V - 9V Input | | | |
| | | M55-6014042R | | M55-6014042R Header | | https://www.digikey.com/en/pr | | \$2.74 | | 1 | | \$2.74 | 40 Position Receptacle Connector 0.050" (1.27mm) Surface Mount Gold | | | |
| | | UJ2-AH-1-SMT-TR | | UJ2-AH-1-SMT-TR USB Port | | https://www.digikey.com/en/pr | | \$1.40 | | 1 | | \$1.40 | USB-A (USB TYPE-A) USB 2.0 Receptacle Connector 4 Position Surface Mount | | | |
| | | 399-C1206C104J3GEC7210TR-ND | | C1206C104J3GEC7210 0.1 uF Cap | | https://www.digikey.com/en/pr | | \$0.86 | | 9 | | \$7.74 | ±5% 25V Ceramic Capacitor C0G, NP0 1206 (3216 Metric) | | | |
| | | C1206C103J2GAC7800 | | C1206C103J2GAC7800 0.01 uF Cap | | https://www.digikey.com/en/pr | | \$0.50 | | 8 | | \$4.00 | 10000 pF ±5% 200V Ceramic Capacitor C0G, NP0 1206 (3216 Metric) | | | |
| | | CL31B106M0HNNNE | | CL31B106M0HNNNE 10 uF Cap | | https://www.digikey.com/en/pr | | \$0.23 | | 2 | | \$0.23 | 10 uF ±20% 16V Ceramic Capacitor X7R 1206 (3216 Metric) | | | |
| | | 04023K210FBWTR500 | | 04023K210FBWTR500 21 pF Cap | | https://www.mouser.com/Proc | | \$0.98 | | 2 | | \$1.96 | Silicon RF Capacitors / Thin Film 25V 21pF 1%Tol ThinFilm 0402 | Concerned about size | | |
| | | C3216X7S1A226M160AC | | C3216X7S1A226M160AC 22 uF Cap | | https://www.digikey.com/en/pr | | \$0.82 | | 2 | | \$1.64 | CAP CER 22UF 10V X7S 1206 | | | |
| | | C2012X7R1A475K125AC | | C2012X7R1A475K125AC 4.7 uF Cap | | https://www.digikey.com/en/pr | | \$0.28 | | 1 | | \$0.28 | ±10% 10V Ceramic Capacitor X7R 0805 (2012 Metric) | | | |
| | | C0603C221J8GAC7867 | | C0603C221J8GAC7867 220 pF Cap | | https://www.digikey.com/en/pr | | \$0.31 | | 1 | | \$0.31 | 220 pF ±5% 10V Ceramic Capacitor C0G, NP0 0603 (1608 Metric) | | | |
| | | 1812R-123J | | 1812R-123J 12 uH Inductor | | https://www.digikey.com/en/pr | | \$2.15 | | 1 | | \$2.15 | 12 µH Unshielded - Inductor 317 mA 20hm Max 1812 (4532 Metric) | | | |
| | | LQH43PN6R8M26L | | LQH43PN6R8M26L 6.8 uH Inductor | | https://www.digikey.com/en/pr | | \$0.40 | | 1 | | \$0.40 | 6.8 µH Shielded Wirewound Inductor 1.4 A 117.6mOhm Max 1812 (4532 Metric) | | | |
| | | RG3216P-68R0-B-T1 | | RG3216P-68R0-B-T1 68 Ohm Resistor | | https://www.digikey.com/en/pr | | \$0.60 | | 1 | | \$0.60 | 68 Ohms ±0.1% 0.25W, 1/4W Chip Resistor 1206 (3216 Metric) Anti-Sulfur, Automotive AEC-Q200 Thin Film | | | |
| | | RMCF1206FT20K0 | | RMCF1206FT20K0 20 kOhm Resistor | | https://www.digikey.com/en/pr | | \$0.10 | | 11 | | \$1.10 | 20 kOhms ±1% 0.25W, 1/4W Chip Resistor 1206 (3216 Metric) Automotive AEC-Q200 Thick Film | | | |
| | | RN73R2ETTD1001F25 | | RN73R2ETTD1001F25 1 kOhm Res | | https://www.digikey.com/en/pr | | \$0.72 | | 2 | | \$1.44 | 1 ±1% 0.25W, 1/4W Chip Resistor 1210 (3225 Metric) Automotive AEC-Q200, Moisture Resistant Metal Film | | | |
| | | RN73R2ETTD1002B25 | | RN73R2ETTD1002B25 10 kOhm Re | | https://www.digikey.com/en/pr | | \$0.80 | | 1 | | \$0.80 | 10 ±0.1% 0.25W, 1/4W Chip Resistor 1210 (3225 Metric) Automotive AEC-Q200, Moisture Resistant Metal Film | | | |
| | | 1N4148WTR | | 1N4148WTR 1N4148 Diode | | https://www.digikey.com/en/pr | | \$0.14 | | 1 | | \$0.14 | Diode Standard 75 V 250mA (DC) Surface Mount SOD-123 | | | |
| | | | | | | | MCU Order Cost: | | | | | \$83.46 | (already ordered, do not order again) | | | |
| Order 2 | 10/28/21 | CKG57KX7R1H475K335J 4.7 uF | | CKG57KX7R1H475K335J 4.7 uF | | https://www.digikey.com/en/pr | | \$4.95 | | | \$1.00 | \$4.95 | 4.7 µF ±10% 50V Ceramic Capacitor X7R SMD, J-Lead | | | |
| | | C1206C103J2GAC7800 | | C1206C103J2GAC7800 0.01 uF Cap | | https://www.digikey.com/en/pr | | \$0.50 | | | \$7.00 | \$3.50 | 10000 pF ±5% 200V Ceramic Capacitor C0G, NP0 1206 (3216 Metric) | | | |
| | | 399-C1206C104J3GEC7210TR-ND | | C1206C104J3GEC7210 0.1 uF Cap | | https://www.digikey.com/en/pr | | \$0.86 | | | \$7.00 | \$6.02 | ±5% 25V Ceramic Capacitor C0G, NP0 1206 (3216 Metric) | | | |
| | | NR4018T4R7M | | NR4018T4R7M 4.7 uH | | https://www.digikey.com/en/pr | | \$0.43 | | | \$1.00 | \$0.43 | 4.7 µH Shielded Wirewound Inductor 1.2 A 108mOhm Max Nonstandard | | | |
| | | | | | | | Order cost: | | | | | \$14.90 | | | | |
| Order 3 | | BZX84C8V2LT1G | | BZX84C8V2LT1G Zener diode | | https://www.digikey.com/en/pr | | \$0.18 | | | \$1.00 | \$0.18 | Zener Diode 8.2 V 225 mW ±5% Surface Mount SOT-23-3 (TO-236) | | | |
| | | BHM-4A3 | | BHM-4A3 battery holder | | https://www.digikey.com/en/pr | | \$3.52 | | | \$1.00 | \$3.52 | | | | |
| | | | | | | | Order cost: | | | | | \$3.70 | | | | |
| EE0 | | | | | | | | | | | | | | | | |
| Order Date | 10-19-21 | Category | Instrumentation Amp | Part Number | AD8221BRZ-R7CT-ND | Item Name | AD8221BRZ-R7 Instrumental | Location to Buy From | https://www.digikey.com/en/pr | Cost per Part | \$10.90 | Quantity | 1 | Total Cost | \$10.90 | IC INST AMP 1 CIRCUIT 8SOIC |
| | | Single Op Amp | | ADA4610-1ARJZ-R7 | ADA4610-1ARJZ-R7 | single | https://www.digikey.com/en/pr | | | \$2.81 | 5 | \$14.05 | IC OPAMP JFET 1 CIRCUIT SOT23-5 | | | |
| | | Capacitors | | 399-7848-1-ND-Cut Tape (CT) | C0603C105K9PAC7867 (1uf) | | https://www.digikey.com/en/pr | | | \$0.10 | 2 | \$0.20 | ±10% 6.3V Ceramic Capacitor X5R 0603 (1608 Metric) | | | |
| | | | | 1276-2897-1-ND - Cut Tape (CT) | CL21A106KPFNNWE (10uf) | | https://www.digikey.com/en/pr | | | \$0.22 | 3 | \$0.66 | CAP CER 10UF 10V X5R 0805 | | | |
| | | | | 1276-1176-1-ND - Cut Tape (CT) | CL05B224KO5NNNC (220nf) | | https://www.digikey.com/en/pr | | | \$0.10 | 2 | \$0.20 | 0.22 µF ±10% 16V Ceramic Capacitor X7R 0402 (1005 Metric) | | | |
| | | | | 478-1114-1-ND - Cut Tape (CT) | 0402YC103KAT2A (10nf) | | https://www.digikey.com/en/pr | | | \$0.10 | 1 | \$0.10 | ±10% 16V Ceramic Capacitor X7R 0402 (1005 Metric) | | | |
| | | | Resistors | 118-CR1206-FX-12R0ELFCT-ND - C | CR1206-FX-12R0ELF (12 oh | | https://www.digikey.com/en/pr | | | \$0.10 | 2 | \$0.20 | 12 ±1% 0.25W, 1/4W Chip Resistor 1206 (3216 Metric) Moisture Resistant Thick Film | | | |
| | | | | A129802CT-ND - Cut Tape (CT) | CRGQC1206F220R (220 ohm | | https://www.digikey.com/en/pr | | | \$0.10 | 3 | \$0.30 | 220 Ohms ±1% 0.25W, 1/4W Chip Resistor 1206 (3216 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film | | | |
| | | | | A129807CT-ND - Cut Tape (CT) | CRGQC1206F560R (560 ohm | | https://www.digikey.com/en/pr | | | \$0.10 | 1 | \$0.10 | 560 Ohms ±1% 0.25W, 1/4W Chip Resistor 1206 (3216 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film | | | |
| | | | | RNCP0805FTD1K00CT-ND - Cut Taj | RNCP0805FTD1K00 (1k) | | https://www.digikey.com/en/pr | | | \$0.10 | 2 | \$0.20 | 1 kOhms ±1% 0.25W, 1/4W Chip Resistor 0805 (2012 Metric) Anti-Sulfur Thin Film | | | |
| | | | | RNCP0805FTD2K00CT-ND - Cut Taj | RNCP0805FTD2K00 (2k) | | https://www.digikey.com/en/pr | | | \$0.10 | 1 | \$0.10 | 2 kOhms ±1% 0.25W, 1/4W Chip Resistor 0805 (2012 Metric) Anti-Sulfur Thin Film | | | |
| | | | | 2019-RK73H2ATT21003FCT-ND - C | RK73H2ATT21003F (100k) | | https://www.digikey.com/en/pr | | | \$0.10 | 1 | \$0.10 | 100 kOhms ±1% 0.25W, 1/4W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film | | | |
| | | | | A129826CT-ND - Cut Tape (CT) | CRGQC1206F22K (22k) | | https://www.digikey.com/en/pr | | | \$0.10 | 2 | \$0.20 | 22 kOhms ±1% 0.25W, 1/4W Chip Resistor 1206 (3216 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film | | | |
| | | | | RNCP0805FTD15K0CT-ND - Cut Taj | RNCP0805FTD15K0 (15k) | | https://www.digikey.com/en/pr | | | \$0.10 | 1 | \$0.10 | 15 kOhms ±1% 0.25W, 1/4W Chip Resistor 0805 (2012 Metric) Anti-Sulfur Thin Film | | | |
| | | | | A129846CT-ND - Cut Tape (CT) | CRGQC1206F1M0 (1M) | | https://www.digikey.com/en/pr | | | \$0.10 | 1 | \$0.10 | 1 MOhms ±1% 0.25W, 1/4W Chip Resistor 1206 (3216 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film | | | |
| | | Buck boost converter | | 5V Step-Up/Step-Down Voltage Regu | Buck boost converter | | https://www.pololu.com/product | | | \$14.95 | 1 | \$14.95 | | | | |
| | | ADC | | LTC2473CMS#PBF-ND | LTC2473CMS#PBF-ND ADC | | https://www.digikey.com/en/pr | | | \$4.55 | 1 | \$4.55 | IC ADC 16BIT SIGMA-DELTA 12MSOP | | | |
| | | Dry Electrodes | | FRI-2140-1E | Package of 15 Disposable Re | | https://www.amazon.com/Pac | | | \$34.95 | 1 | \$34.95 | | | | |
| Order part 2 | | | | | | | | | | | | | | | | |
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