

Flag Reaction Test Structure BOM							
Part Number	Part Name	Description	Material	Quantity	Supplier	Rev	Notes
FRT-02-001	Touchscreen Monitor	10.1" Touchscreen Display	Plastic + PCB + Glass	1	Amazon (ASIN: B0BG7QP8P4)	A	Unit Price: \$79.99
FRT-02-002	Mini PC	ACEMAGIC Vista Mini V1	PCB + Components	1	Amazon (ASIN: B0DSW5MRSB)	A	Unit Price: \$129.99
FRT-02-003	HDMI Cable	4K HDMI Cable 6.6ft / 2m	PVC / Copper	2	Amazon (ASIN: B07TDH11BJ)	A	Unit Price: \$5.99
FRT-02-004	Electromagnet	5V Electromagnet, 10kg holding	Steel / Copper	1	Digi-Key (1528-2690-ND)	A	Unit Price: \$14.95
FRT-02-005	Compute Module	Raspberry Pi Compute Module 5 (8GB RAM)	PCB + Silicon	1	Digi-Key (2648-SC1598-ND)	A	Unit Price: \$96.39
FRT-02-006	M.2 HAT	Raspberry Pi HAT for SSD connection	PCB	1	Digi-Key (2648-SC1166-ND)	A	Unit Price: \$12.00
FRT-02-007	Arduino Board	Arduino Mega 2560 ATmega2560	PCB + Components	1	Digi-Key (1050-1018-ND)	A	Unit Price: \$49.90
FRT-02-008	HDMI Cable	HDMI to HDMI Micro, 3ft	PVC / Copper	3	Digi-Key (5214-HDMIADMM3-ND)	A	Unit Price: \$3.70
FRT-02-009	SSD	120GB M.2 NVMe TLC SSD	Silicon	1	Digi-Key (1282-AF120GSTJC-DBBX-ND)	A	Unit Price: \$32.19
FRT-02-010	Resistors (100Ω)	Chip Resistor, 0402 package	Thick film	10	TBD (e.g., Digi-Key/Mouser)	A	ANSI, 0402 (1005 Metric)
FRT-02-011	Resistors (10kΩ)	Chip Resistor, 0402 package	Thick film	10	TBD (e.g., Digi-Key/Mouser)	A	ANSI, 0402 (1005 Metric)
FRT-02-012	Capacitor (1000µF)	Polarized Tantalum, 1206	Tantalum	1	TBD	A	Polymer capacitor
FRT-02-013	Capacitors (2200µF)	Polarized Tantalum, 1206	Tantalum	2	TBD	A	Polymer capacitors
FRT-02-014	Capacitors (100nF)	MLCC Ceramic, 0402	Ceramic	10	TBD	A	General decoupling
FRT-02-015	MOSFET	IRF520NPBF, TO-220AB	Silicon	10	Infineon (Digi-Key/Mouser)	A	100V, 9.7A, 48W
FRT-02-016	Schottky Diode	MBR0520LT1G, SOD-123	Silicon	10	onsemi (Digi-Key/Mouser)	A	20V, 500mA
FRT-02-017	Pin Header	2x20 Male Pin Header	Copper + Plastic	1	TBD	A	Raspberry Pi GPIO
FRT-02-018	Pin Headers	1x2 Male Pin Headers	Copper + Plastic	10	TBD	A	2.54mm pitch

Legend
Ordered
Projected