

Immutable Mobile Terminal – Mechanical Connections

Source	Target	Joint	Delta	Description
front_bezel_housing	main_chassis_midframe	M1.6 screws	(0, -5.2, 1.5)	Front Bezel Enclosure â” CNC Aluminum Midframe â€” M1.6 screws; CNC Aluminum Midframe sits 5.2mm down, 1.5mm forward from Front Bezel Enclosure
display_mount_bracket	main_chassis_midframe	M1.4 screws	(0, 2.3, 0.5)	Display Mounting Bracket â” CNC Aluminum Midframe â€” M1.4 screws; CNC Aluminum Midframe sits 2.3mm up, 0.5mm forward from Display Mounting Bracket
rear_cover_shell	main_chassis_midframe	assembly_screws into internal_thread_inserts	(0, -0.2, -1.5)	Rear Cover with Tamper Mesh Channels â” CNC Aluminum Midframe â€” assembly_screws into internal_thread_inserts; CNC Aluminum Midframe sits 1.5mm back from Rear Cover with Tamper Mesh Channels
internal_thread_inserts	main_chassis_midframe	heat-set press fit	(0, 0, 0)	Brass Threaded Heat-Set Inserts â” CNC Aluminum Midframe â€” heat-set press fit; CNC Aluminum Midframe centered on Brass Threaded Heat-Set Inserts; CNC Aluminum Midframe rotated 90° about X
optical_tamper_light_pipe	rear_cover_shell	snap-fit retention clips	(0, 0, 0)	Optical Tamper Light Guide â” Rear Cover with Tamper Mesh Channels â€” snap-fit retention clips; Rear Cover with Tamper Mesh Channels centered on Optical Tamper Light Guide
fingerprint_sensor_holder	front_bezel_housing	M1.4 screws	(0, 4, 0)	Biometric Sensor Secure Holder â” Front Bezel Enclosure â€” M1.4 screws; Front Bezel Enclosure sits 4mm up from Biometric Sensor Secure Holder
nfc_antenna_spacer	rear_cover_shell	pressure-sensitive adhesive tape	(0, 4.3, 0)	NFC Antenna Ferrite Spacer â” Rear Cover with Tamper Mesh Channels â€” pressure-sensitive adhesive tape; Rear Cover with Tamper Mesh Channels sits 4.3mm up from NFC Antenna Ferrite Spacer

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wireless_antenna_isolator	main_chassis_midframe	snap-fit	(0, 5.8, 0)	RF Antenna Isolation Frame â†” CNC Aluminum Midframe â€” snap-fit; CNC Aluminum Midframe sits 5.8mm up from RF Antenna Isolation Frame
hsm_shield_can	main_chassis_midframe	M2 bolts	(0, 5.5, 0)	HSM Physical Shielding Can â†” CNC Aluminum Midframe â€” M2 bolts; CNC Aluminum Midframe sits 5.5mm up from HSM Physical Shielding Can
application_processor_soc_mount	main_chassis_midframe	M2 screws	(0, 9.3, 0)	Main Application Processor Mount â†” CNC Aluminum Midframe â€” M2 screws; CNC Aluminum Midframe sits 9.3mm up from Main Application Processor Mount
assembly_screws	rear_cover_shell	through-hole insertion	(0, 0, 0)	Enclosure Assembly Screws â†” Rear Cover with Tamper Mesh Channels â€” through-hole insertion; Rear Cover with Tamper Mesh Channels centered on Enclosure Assembly Screws
display_mount_bracket	touchscreen_display	mount	(0, 3.1, 0)	Display Mounting Bracket â†” High-Res Touchscreen Display â€” mount; High-Res Touchscreen Display sits 3.1mm up from Display Mounting Bracket
optical_tamper_light_pipe	optical_tamper_sensor	mount	(0, -3.3, 0)	Optical Tamper Light Guide â†” Optical Light Tamper Detector â€” mount; Optical Light Tamper Detector sits 3.3mm down from Optical Tamper Light Guide
fingerprint_sensor_holder	fingerprint_sensor	mount	(0, -1.2, 0)	Biometric Sensor Secure Holder â†” Biometric Fingerprint Sensor â€” mount; Biometric Fingerprint Sensor sits 1.2mm down from Biometric Sensor Secure Holder
nfc_antenna_spacer	nfc_transceiver	mount	(0, -1.7, 0)	NFC Antenna Ferrite Spacer â†” NFC Secure Reader â€” mount; NFC Secure Reader sits 1.7mm down from NFC Antenna Ferrite Spacer
wireless_antenna_isolator	wireless_module	mount	(0, 1.8, 0)	RF Antenna Isolation Frame â†” Wi-Fi and Bluetooth Module â€” mount; Wi-Fi and Bluetooth Module sits 1.8mm up from RF Antenna Isolation Frame

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hsm_shield_can	discrete_hsm	mount	(0, -1.9, 0)	HSM Physical Shielding Can â†” Hardware Security Module â€” mount; Hardware Security Module sits 1.9mm down from HSM Physical Shielding Can
application_processor_soc_mount	application_processor_soc	mount	(0, 5.4, 0)	Main Application Processor Mount â†” Main Application Processor â€” mount; Main Application Processor sits 5.4mm up from Main Application Processor Mount
front_bezel_housing	active_discharge_switch	attached	(0, 0, 2.6)	Front Bezel Enclosure â†” Fast Zeroization Power Switch â€” attached; Fast Zeroization Power Switch sits 2.6mm forward from Front Bezel Enclosure
front_bezel_housing	pmic	attached	(0, 0, 2.4)	Front Bezel Enclosure â†” Power Management IC â€” attached; Power Management IC sits 2.4mm forward from Front Bezel Enclosure
front_bezel_housing	usb_c_pd_controller	attached	(0, -1.5, 0)	Front Bezel Enclosure â†” USB-C Power Delivery Controller â€” attached; USB-C Power Delivery Controller sits 1.5mm down from Front Bezel Enclosure