

MSI GE63 Raider RGB 8RE Keyboard Matrix

FPC pin's	17	18	19	20	21	22	23	24
1	Right Fn-Vol Up	Backspace	Num Lock	KP Slash	F12 Fn-Sleep	KP 7	semicolon	comma
2	Left Fn-Vol Dn	Backslash	Caps Lock	KP Asterix	F11	KP 6		H
3	Up			KP Plus	F9	KP 8	quote	P
4	Down			KP Minus	F10	KP 9		L
5	1	F1	Insert	F8	F7	KP 1	Equal	O
6	5	Delete	7	F6	F5	KP 0 Fn-Vol Mute	Period	K
7	RIGHT_ALT				E		V	LEFT_ALT
8	RIGHT_SHIFT	C				M		LEFT_SHIFT
9		F	space				G	
10	RIGHT_CTRL		Z	X				LEFT_CTRL
11		R		D	Q			
12			S		W	N		
13				A		B	T	
14	4	0	6		F4	KP 2	Right Brace	i
15	3	9	End Fn-Page Dn		F3	KP 4	Minus	J
16	2	8	Home Fn-Page Up	Menu	F2	KP 3	slash	U
25			GUI	FN		KP Enter	Enter	
26	Tab		KP Period	~	esc	KP 5	Left brace	Y

This laptop had a part failure on the motherboard that caused the keyboard controller to not work. The solution was to use a Teensy converter board. Here is the Teensy 4.0 board prior to installation inside the case.



Once installed in the case, there is a slight bulge but not too bad. Perhaps a future Teensy converter board can be made thinner.



For now, the USB from the Teensy is routed outside the case to a USB connector (see below). Eventually a mini PCIE Express to USB adapter will be used to keep all wires inside.

