

M-AUDIO KEYSTATION61 MK3 Key Scan																											
		CN13													CN14												
		1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	
		PB 9	PB 8	PB 5	PB 4	PB 3	PA 15	NC	PA 10	PA 9	PA 8	PB 15	PB 14	PB 13	PC 14	PC 15	PA 0	PA 1	PA 2	PA 3	PA 4	PA 5	PA 6	PA 7	PB 0	PB 1	
1	C2				0			NC					1	2													
2	C#			0									1	2													
3	D		0										1	2													
4	D#	0											1	2													
5	E												1	2				0									
6	F												1	2			0										
7	F#												1	2		0											
8	G												1	2	0												
9	G#				0							1	2														
10	A			0								1	2														
11	A#		0									1	2														
12	B	0										1	2														
13	C3											1	2					0									
14	C#											1	2				0										
15	D											1	2			0											
16	D#											1	2		0												
17	E				0				1	2																	
18	F			0					1	2																	
19	F#		0						1	2																	
20	G	0							1	2																	
21	G#								1	2								0									
22	A								1	2							0										
23	A#								1	2						0											
24	B								1	2					0												
25	C4				0	1	2																				
26	C#			0		1	2																				
27	D		0			1	2																				
28	D#	0				1	2																				
29	E					1	2											0									
30	F					1	2										0										
31	F#					1	2									0											
32	G					1	2								0												
33	G#				0																			1	2		
34	A			0																				1	2		
35	A#		0																					1	2		
36	B	0																						1	2		
37	C5							NC										0						1	2		
		1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	

		1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12
		PB 9	PB 8	PB 5	PB 4	PB 3	PA 15		PA 10	PA 9	PA 8	PB 15	PB 14	PB 13	PC 14	PC 15	PA 0	PA 1	PA 2	PA 3	PA 4	PA 5	PA 6	PA 7	PB 0	PB 1
38	C#							NC									0								1	2
39	D															0									1	2
40	D#														0										1	2
41	E				0																			1	2	
42	F			0																				1	2	
43	F#		0																					1	2	
44	G	0																						1	2	
45	G#																0							1	2	
46	A															0								1	2	
47	A#															0								1	2	
48	B														0									1	2	
49	C6				0																	1	2			
50	C#			0																			1	2		
51	D		0																				1	2		
52	D#	0																					1	2		
53	E																0						1	2		
54	F															0							1	2		
55	F#															0							1	2		
56	G														0								1	2		
57	G#				0														1	2						
58	A			0															1	2						
59	A#		0																1	2						
60	B	0																	1	2						
61	C7							NC										0	1	2						
62	!																o!		1	2						
63	!															o!			1	2						
64	!														o!				1	2						

Key:

0 – Output A 4us 4V pulse repeated at 100us intervals

1 – Input The first contact to operate.

2 – Input The second contact to operate

! _ Spare Add a diode and contact to generate codes in these unused positions

Notes on use with Midi Interface:

a. Scanned outputs are connected to scanned inputs via dual diodes in a package marked A1, probably BAW56. Each piano key operates two contacts. The table above shows contact 1 which closes before contact 2 as the piano key is depressed. Contact 2 releases before contact 1 as the piano key is released.

b. CN13 pin 7 has no connection.

c. CN13 and CN14 are 2mm pitch of unknown type, with 2mm pitch ribbon cable but may be mated with 2mm pitch pin headers.

d. A peddleboard using the same scanning formation leaves some GPIO available e.g. PA1-PB1 become available for 8 analogue expression inputs, PB3-PB14 available for additional contacts.