# PA711KA4-PE Data Sheet 68 pin PLCC *Dead-Bug* socket/28 pin DIP 0.6" plug

### Supported Device/Footprints

This adapter supports programming OTP or EPROM in Motorola 68HC11KA4 devices on 28 pin DIP programmers. The devices must be packaged in the 68 pin PLCC package (FN68).

Device			Programmer		
Mfgr	Device	Package	Device	Plug	
Motorola	68HC711KA	4 PLCC	27C256	28 pin DIP	

## Adapter Dimensions



PA711KA4-PE

# Adapter Construction

The adapter is made up of 2 sub-assemblies. They assemble via connectors making the adapter modular. This way the sub-assemblies can be replaced when they wear out. When disassembling the adapter take care not to bend the pins. When reassembling the adapter note the pin 1 indicators to align the parts correctly.

#### Test Socket

QFP Lidded ZIF socket

Yamaichi Part #: IC120-0684-204 LSC Part #: 68-204

Note: This is a Dead-Bug socket, the device inserts with the pins up.

#### PA711KA4-PE

Accepts the test socket and performs the wiring shown in the Adapter Wiring section.



## PROG mode EPROM Address Mapping

During normal operation the 24K bytes of EPROM in a 'KA4 is at address A000 thru FFFF. In PROG MODE the same EPROM is accessed by the programmer at addresses 2000 thru 7FFF. Additionally, PROG MODE addresses 0000 thru 1FFF of the 'KA4 are not programmable (they always read as FF).

The value intended for address A000 will have to be programmed into address 2000 on the EPROM programmer. When installed and run the 'KA4 will fetch that byte from address A000.

The executable/load address translation may be made at compile/assemble time or during programming. Some assemblers and linkers provide a PHASE command to generate HEX files where the EPROM address and executable addresses are not the same. Most programmers allow either the hex file to be loaded with an offset, or the EPROM to be programmed from anywhere in the RAM. Either method will do.

#### Adapter Wiring

The following chart shows the connections from the QFP device to the adapter's DIP plug. \*14 = 100K Pulldown

DEVICE	SIGNAL	PLUG	PLUG	SIGNAL	DEVICE
1	VCC	28	28	VCC	68
2	GND	14	14	GND	67
3	GND	14	14	GND	66
4	GND	14	14	GND	65
5	GND	14	14	GND	64
6	GND	14	14	GND	63
7	GND	14	14*	ТΧ	62
8	GND	14	14*	RX	61
9	GND	14	14	GND	60
10	-OE	22	14	GND	59
11	A14	27	14*	RST-	58
12	A13	26	-	N/C	57
13	A12	2	14*	EXTAL	56
14	A11	23	-	N/C	55
15	A10	21	-	N/C	54
16	A9	24	19	D7	53
17	A8	25	18	D6	52
18	GND	14	17	D5	51
19	N/C	-	16	D4	50
20	GND	14	19	D3	49
21	GND	14	13	D2	48
22	VPP	1	12	D1	47
23	GND	14	11	D0	46
24	-CE	20	10	A0	45
25	GND	14	9	A1	44
26	GND	14	8	A2	43
27	GND	14	7	A3	42
28	GND	14	6	A4	41
29	GND	14	5	A5	40
30	GND	14	4	A6	39
31	GND	14	3	A7	38
32	GND	14	14	GND	37
33	GND	14	14	GND	36
34	GND	14	14	GND	35