



PUMA 84FV512006 - 90/12/15

Issue 1.0 Sept 2001

16M x 32 FLASH Module

## Description

The PUMA 84 range of devices provide a high density, surface mount memory solution with density up to twice that of standard monolithic devices.

The PUMA 84 may accommodate various memory technologies including SRAM, FLASH and EEPROM. The devices are designed to offer a defined upgrade path and may be user configured as 8, 16 or 32 bits wide.

The PUMA 84FV512006 is a 16M x 32, 3.3V Flash Module in a 84 'J' Leaded package which complies with the JEDEC 84 PLCC standard.

Access times of 90, 120 and 150ns are available.

The 3.3V device is available to commercial and industrial temperature grade.

## Features

- 512 Mbit 3.3V±10% Flash.
- May be organised as 16Mx32, 32Mx16 & 64Mx8
- Flexible Sector (64KByte) Architecture.
- 100K Min. Erase cycles per sector.
- Access times of 90,120 and 150ns.
- Selectable input and output voltage levels via the  $V_{IO}$
- Embedded chip erase and program algorithms.
- Sector protection features.
- 10 year data retention.
- Multiple Ground pins for maximum noise immunity.
- Commercial and Industrial temperature grades.
- JEDEC Standard 84 'J' Lead surface mount package.

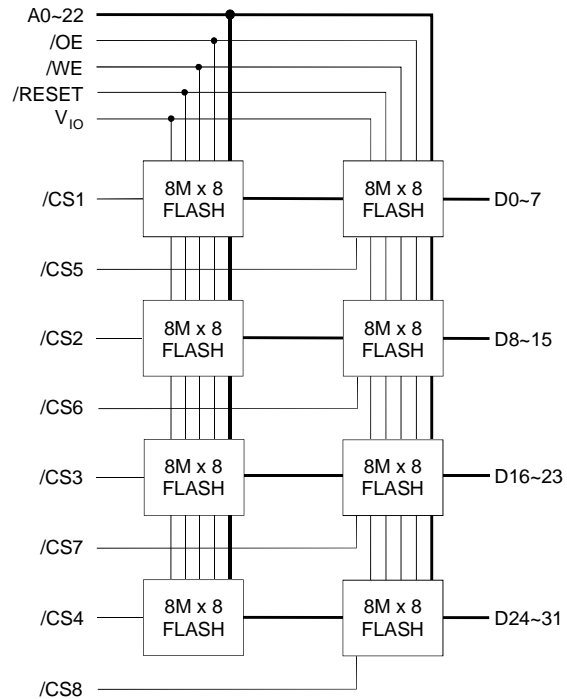
## Package Details

PUMA 84 - Plastic 84 'J' Leaded Package.

Max. Dimensions - 30.35 x 30.35 x 5.08 (Max.)

All Dimensions in mm.

## Block Diagram



## Pin Definition

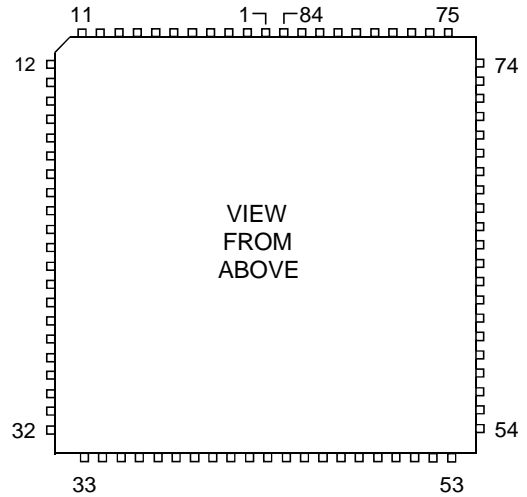
See page 2.

## Pin Functions

Description	Signal
Address Input	A0~A22
Data Input/Output	D0~D31
Chip Select	/CS1~8
Write Enable	/WE
Output Enable	/OE
Hardware Reset	/RESET
No Connect	NC
I/O Voltage Supply	$V_{IO}$
Power	$V_{CC}$
Ground	GND

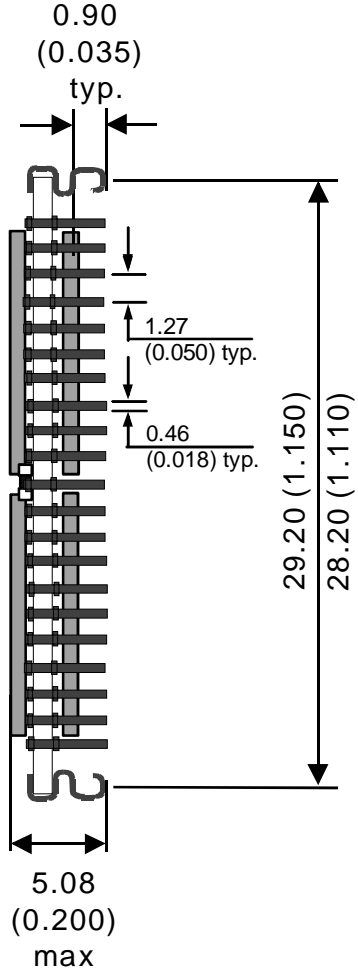
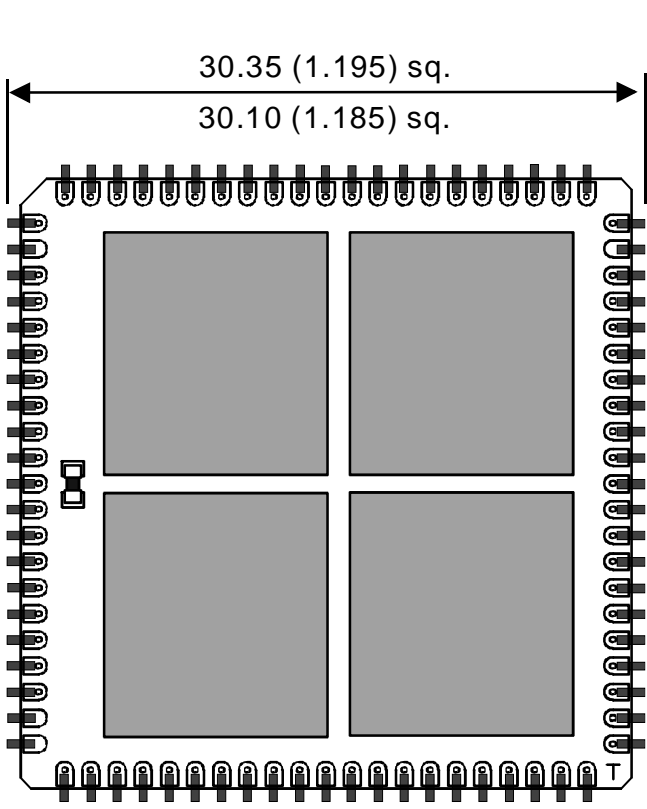
## Pin Definition - PUMA84FV512006

Pin	Signal	Pin	Signal
1	V <sub>CC</sub>	43	V <sub>CC</sub>
2	NC	44	A13
3	/CS1	45	A12
4	/CS2	46	A11
5	/CS3	47	A10
6	/CS4	48	A9
7	A17	49	A8
8	A18	50	A7
9	D16	51	D0
10	A19	52	NC
11	A20	53	NC
12	A21	54	NC
13	A22	55	NC
14	D17	56	D1
15	D18	57	D2
16	D19	58	D3
17	GND	59	GND
18	D20	60	D4
19	D21	61	D5
20	D22	62	D6
21	D23	63	D7
22	V <sub>CC</sub>	64	V <sub>CC</sub>
23	D24	65	D8
24	D25	66	D9
25	D26	67	D10
26	D27	68	D11
27	GND	69	GND
28	D28	70	D12
29	D29	71	D13
30	D30	72	D14
31	A23	73	V <sub>IO</sub>
32	NC	74	NC
33	/RESET	75	D15
34	NC	76	A14
35	D31	77	A15
36	A6	78	A16
37	A5	79	/WE
38	A4	80	/OE
39	A3	81	/CS5
40	A2	82	/CS6
41	A1	83	/CS7
42	A0	84	/CS8



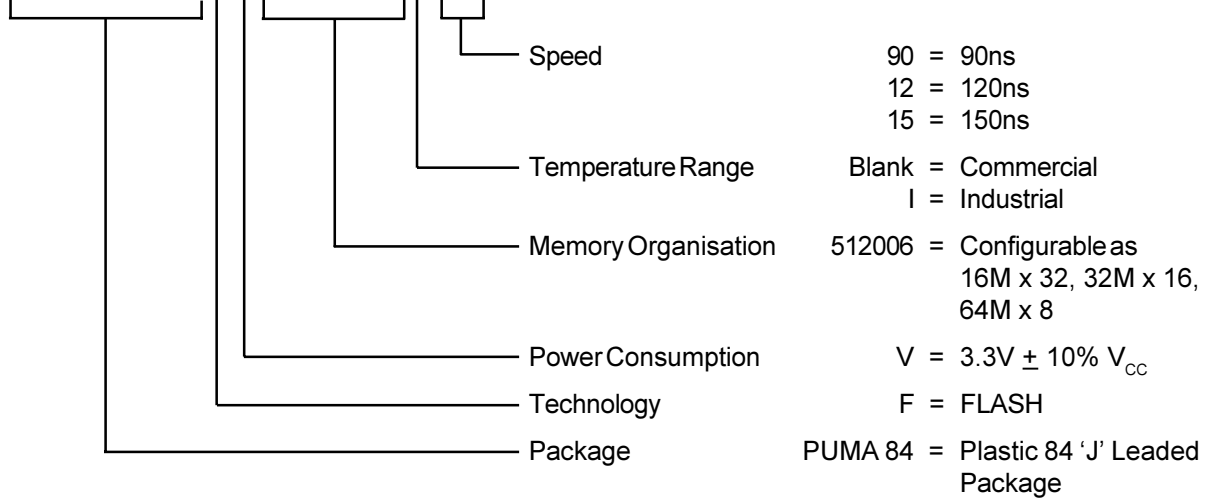
Package Details

PUMA 84 - Plastic 84 'J' Leaded Package.



## Ordering Information

### **PUMA 84FV512006I-15**



**Note :**

Although this data is believed to be accurate the information contained herein is not intended to and does not create any warranty of merchantability or fitness for a particular purpose.

Our products are subject to a constant process of development. Data may be changed without notice.

Products are not authorised for use as critical components in life support devices without the express written approval of a company director.