

DRAM MODULE

M374F0805DT1-C

M374F0805DT1-C Fast EDO Mode without buffer

8M x 72 DRAM DIMM with ECC Using 4Mx16 & 4Mx4, 4K Refresh, 3.3V

GENERAL DESCRIPTION

The Samsung M374F0805DT1-C is a 8Mx72bits Dynamic RAM high density memory module. The Samsung M374F0805DT1-C consists of eight CMOS 4Mx16bits DRAMs in TSOP 400mil packages and four CMOS 4Mx4bits DRAMs in TSOP 300mil package and one 2K EEPROM for SPD in 8-pin TSSOP package mounted on a 168-pin glass-epoxy substrate. A 0.1 or 0.22uF decoupling capacitor is mounted on the printed circuit board for each DRAM. The M374F0805DT1-C is a Dual In-line Memory Module and is intended for mounting into 168 pin edge connector sockets.

FEATURES

- Part Identification
 - M374F0805DT1-C(4096 cycles/64ms, TSOP II)
- New JEDEC standard proposal without buffer
- Serial Presence Detect with EEPROM
- Extended Data Out Mode Operation
- CAS-before-RAS Refresh capability
- RAS-only and Hidden refresh capability
- LVTTTL compatible inputs and outputs
- Single +3.3V±0.3V power supply
- PCB : Height(1000mil), double sided component

PERFORMANCE RANGE

Speed	tRAC	tCAC	tRC	tHPC
-C50	50ns	13ns	84ns	20ns
-C60	60ns	15ns	104ns	25ns

PIN CONFIGURATIONS

Pin	Front	Pin	Front	Pin	Front	Pin	Back	Pin	Back	Pin	Back
1	Vss	29	CAS1	57	DQ18	85	Vss	113	CAS5	141	DQ50
2	DQ0	30	RAS0	58	DQ19	86	DQ32	114	RAS1	142	DQ51
3	DQ1	31	OE0	59	Vcc	87	DQ33	115	DU	143	Vcc
4	DQ2	32	Vss	60	DQ20	88	DQ34	116	Vss	144	DQ52
5	DQ3	33	A0	61	NC	89	DQ35	117	A1	145	NC
6	Vcc	34	A2	62	DU	90	Vcc	118	A3	146	DU
7	DQ4	35	A4	63	NC	91	DQ36	119	A5	147	NC
8	DQ5	36	A6	64	Vss	92	DQ37	120	A7	148	Vss
9	DQ6	37	A8	65	DQ21	93	DQ38	121	A9	149	DQ53
10	DQ7	38	A10	66	DQ22	94	DQ39	122	A11	150	DQ54
11	DQ8	39	*A12	67	DQ23	95	DQ40	123	*A13	151	DQ55
12	Vss	40	Vcc	68	Vss	96	Vss	124	Vcc	152	Vss
13	DQ9	41	Vcc	69	DQ24	97	DQ41	125	DU	153	DQ56
14	DQ10	42	DU	70	DQ25	98	DQ42	126	DU	154	DQ57
15	DQ11	43	Vss	71	DQ26	99	DQ43	127	Vss	155	DQ58
16	DQ12	44	OE2	72	DQ27	100	DQ44	128	DU	156	DQ59
17	DQ13	45	RAS2	73	Vcc	101	DQ45	129	RAS3	157	Vcc
18	Vcc	46	CAS2	74	DQ28	102	Vcc	130	CAS6	158	DQ60
19	DQ14	47	CAS3	75	DQ29	103	DQ46	131	CAS7	159	DQ61
20	DQ15	48	W2	76	DQ30	104	DQ47	132	DU	160	DQ62
21	CB0	49	Vcc	77	DQ31	105	CB4	133	Vcc	161	DQ63
22	CB1	50	NC	78	Vss	106	CB5	134	NC	162	Vss
23	Vss	51	NC	79	NC	107	Vss	135	NC	163	NC
24	NC	52	CB2	80	NC	108	NC	136	CB6	164	NC
25	NC	53	CB3	81	NC	109	NC	137	CB7	165	SA0
26	Vcc	54	Vss	82	SDA	110	Vcc	138	Vss	166	SA1
27	W0	55	DQ16	83	SCL	111	DU	139	DQ48	167	SA2
28	CAS0	56	DQ17	84	Vcc	112	CAS4	140	DQ49	168	Vcc

PIN NAMES

Pin Name	Function
A0 - A11	Address Input
DQ0 - DQ63	Data In/Out
W0, W2	Read/Write Enable
OE0, OE2	Output Enable
RAS0 - RAS3	Row Address Strobe
CAS0 - CAS7	Column Address Strobe
Vcc	Power(+3.3V)
Vss	Ground
NC	No Connection
DU	Don't use
SDA	Serial Address /Data I/O
SCL	Serial Clock
SA0 -SA2	Address in EEPROM
CB0 - CB7	Check Bit

* These pins are not used in this module.