Ordering Part Number Designators

Am29LV 640 D U 90R WH I

OPTIONAL PROCESSING

Blank = Standard Processing

N = ESN devices

TEMPERATURE RANGE

C = Commercial (0°C to +70°C)

I = Industrial (–40°C to +85°C)

E = Extended (–55°C to +125°C)

PACKAGE TYPE

P = Plastic Dual Inline Package (PDIP)

J = Rectangular Plastic Leaded Chip Carrier (PLCC)

S = 44-Pin Small Outline (SO) Package (SO 044)

Z = 56-Pin Shrink Small Outline Package (SSOP) (SSO056)

Thin Small Outline Packages (TSOP):

E = 32, 40, or 48-Pin Standard Pinout (TS 048) (for Am29F016/017 devices only, E = 48-pin, E4 = 40-pin)

E2 = 40/44-pin Type-II Standard Pinout (TS 044)

F = 32, 40, or 48-Pin Reverse Pinout (TSR048) (for Am29F016/017 devices only, F = 48-pin, F4 = 40-pin)

F2 = 40/44-pin Type-II Reverse Pinout (TSR044)

Fine-Pitch Ball Grid Array Packages, 0.8 mm ball pitch (unless otherwise noted):

MA = 63-Ball, 11 x 12 mm body, 1.25 mm height (FSA063)

VA = 44=Ball, 9.2 x 8 mm body, 0.5 mm ptich (VDA044)

Fine-Pitch Ball Grid Array Packages (continued)

WA = 48-Ball, 6 x 8 mm body (FBA048)

WB = 48-Ball, 6 x 9 mm body (FBB048)

WC = 48-Ball, 8 x 9 mm body (FBC048)

WD = 63-Ball, 8 x 14 mm body (FBD063)

WG = 40-Ball, 8 x 15 mm body (FBE040)

WH = 63-Ball, 12 x 11 mm body (FBE063)

WK = 47-Ball, 7 x 10 mm body, 0.5 mm ball pitch (FDD047)

WL = 48-Ball, 11 x 10 mm body, 0.5 mm ball pitch (FDE048)

WM = 48-Ball, 6 x 12 mm body (FBD048)

WN = 84-Ball, 11 x 12 mm body (FBF084)

W? = 60-Ball, ? x ? mm body (FDE060)

Fortified Ball Grid Array Packages, 1.0 mm ball pitch (unless otherwise noted):

PA = 64-Ball, 13 x 11 mm body, 1 mm height (LSA064)

PB = 80-Ball, 13 x 11 mm body (LAA080)

PC = 64-Ball 13 x 11 mm body (LAA064)

PE = 80-Ball, 10 x 15 mm body (LAB080)

SPEED OPTION (t_{ACC}), VOLTAGE REGULATION

1.8 Volt Devices

**(*) = 2 or 3 digits: (Am29SL, DS) Indicates speed in ns, V_{CC} = 1.8–2.2 V

*A, *B = (Am29BDS) Digit indicates asynchronous speed (5 = 55 ns, 7 = 70 ns, 9 = 90 ns, 11 = 110 ns), letter represents burst mode speed and handshaking availability (A=40 MHz, B=54 MHz, etc. See page 5 notes), V_{CC} = 1.7–1.9 V unless otherwise specified

3 Volt Devices

**(*) = 2 or 3 digits: Indicates speed in ns; device is full voltage range, V_{CC} = 2.7–3.6 V

**(*)R = 2 or 3 digits indicate speed in ns, "R" indicates regulated voltage range V_{CC} = 3.0–3.6 V

*(*)1(R) = (Am29LV64x) First two digits indicate speed in ns x 10. "1" indicates $V_{IO} < V_{CC}$, "R", if present, indicates regulated voltage range as defined above

5 Volt Devices

*(*)0 = Speed option ends in "0": Indicates speed in ns. V_{CC} = 5.0 V ±10% (4.5—5.5 V)

*5 = Speed option ends in "5": Check table and/or data sheet for actual speed and voltage range. (Am29F400) If part number has a "0" after the temperature range, then V_{CC} = 5.0 V ±10% (4.5—5.5 V)

SECTOR ARCHITECTURE AND SECTOR WRITE PROTECTION

T = Top boot sector

B = Bottom boot sector

H = Uniform sector device, highest address sector protected

L = Uniform sector device, lowest address sector protected

U/blank = Uniform sector device

J40 = (UltraNAND only) 100% usable blocks

PROCESS TECHNOLOGY

B = 0.32 µm technology

C = 0.32 µm thin-film technology

D = 0.23 µm thin-film technology

G = 0.17 µm thin-film technology

M = MirrorBit technology

DENSITY, BUS WIDTH, AND SECTOR ORGANIZATION

***(*) = Density is as noted in table. Digits broadly give an indication of device density. Bus width and organization vary by family.

FLASH MEMORY DEVICE FAMILY

Am29BDS = 1.8 Volt-only, Simultaneous Read/Write, Burst Mode

Am29DS = 1.8 Volt-only, Simultaneous Read/Write

Am29PDS = 1.8 Volt-only, Simultaneous Read/Write, Page Mode

Am29SL = 1.8 Volt-only

Am29BDD = 2.5 Volt-only, Simultaneous Read/Write, Burst Mode

Am29LV = 3 Volt-only

Am29DL = 3 Volt-only, Simultaneous Read/Write

Am29BL = 3 Volt-only, Burst Mode

Am29PL = 3 Volt-only, Page Mode

Am29PDL = 3 Volt-only, Simultaneous Read/Write, Page Mode

Am30LV = 3 Volt-only, UltraNAND™

Am29F = 5 Volt-only