



WHE to TU Package Type Migration

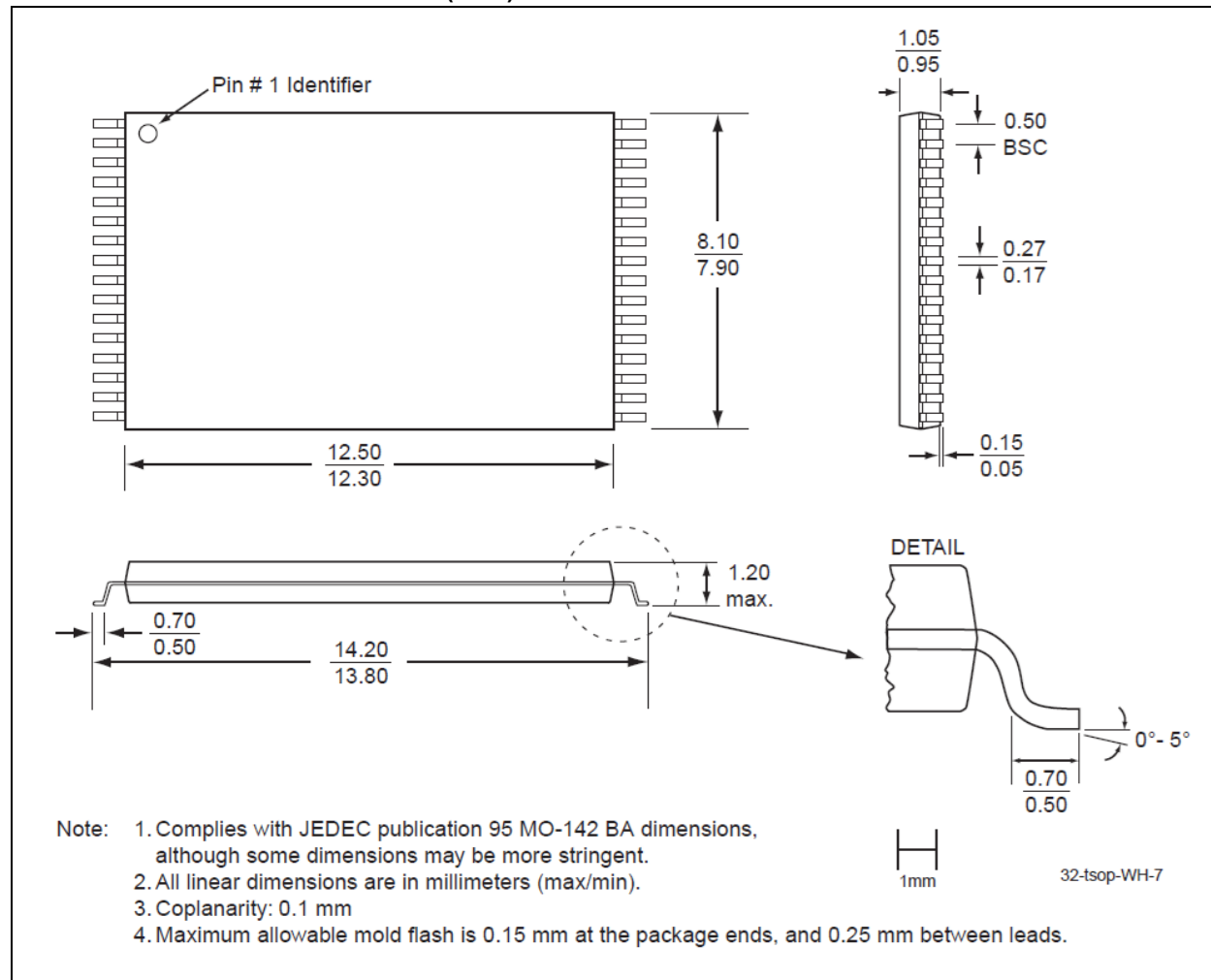
1.0 INTRODUCTION

Microchip has introduced a new RoHS compliant 32-Lead TSOP package, TU (6JW), to replace the end-of-life WHE (TP) package. This update pertains to the SST39 Parallel Flash product families and the SST49LF008A Firmware Hub product. This document lists the dimension differences that must be considered when migrating from the WHE to the TU package type.

WHE TO TU PACKAGE TYPE MIGRATION

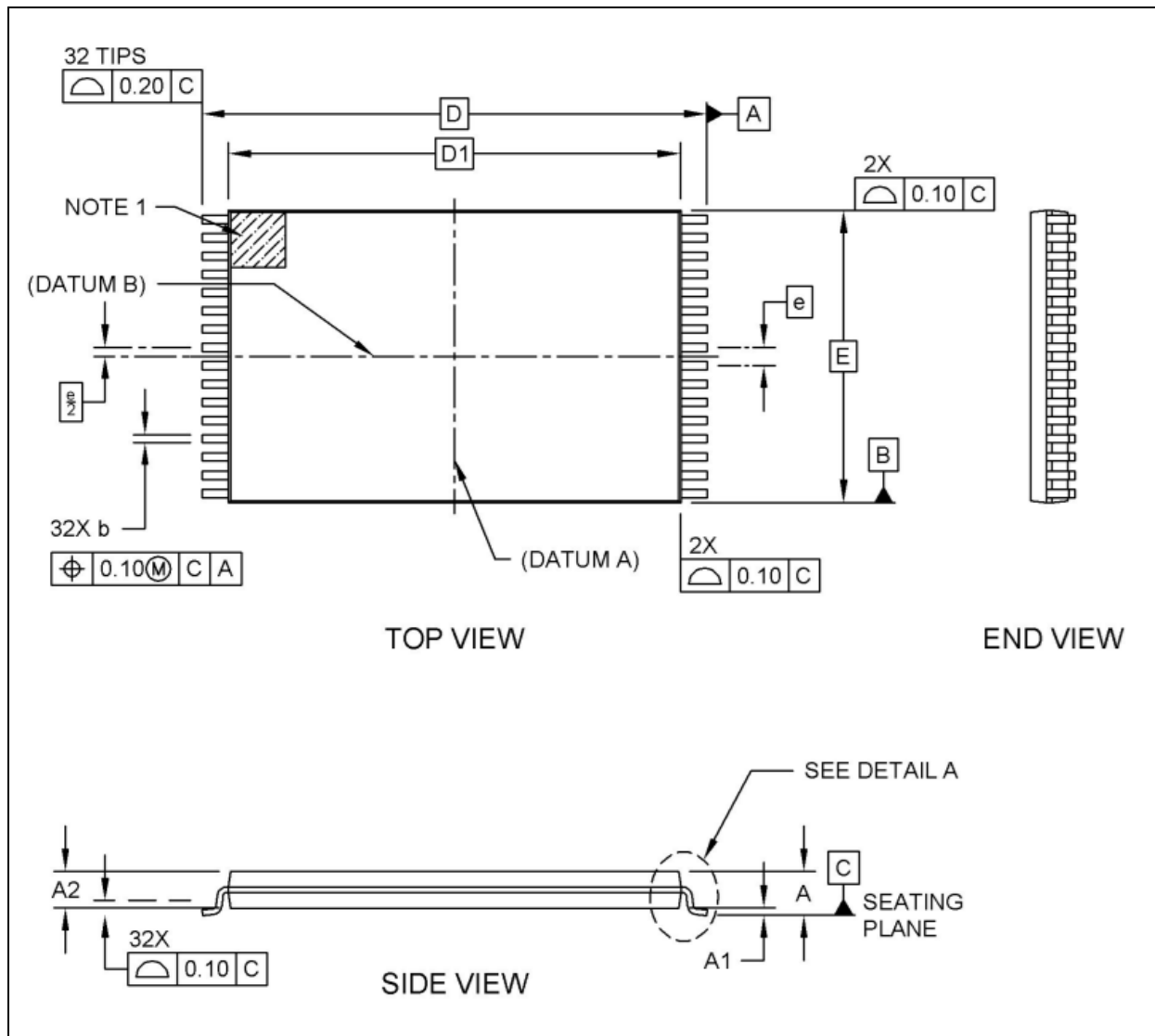
2.0 PACKAGE DIAGRAMS

FIGURE 2-1: WHE PACKAGE (EOL)



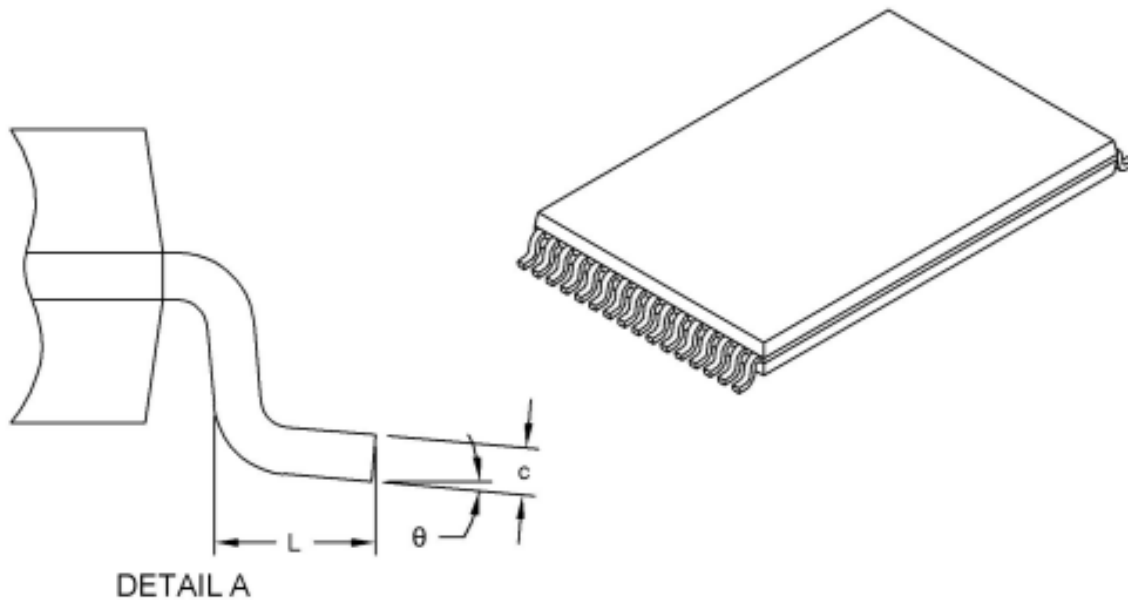
WHE TO TU PACKAGE TYPE MIGRATION

FIGURE 2-2: TU PACKAGE



WHE TO TU PACKAGE TYPE MIGRATION

FIGURE 2-3: TU PACKAGE DIMENSION



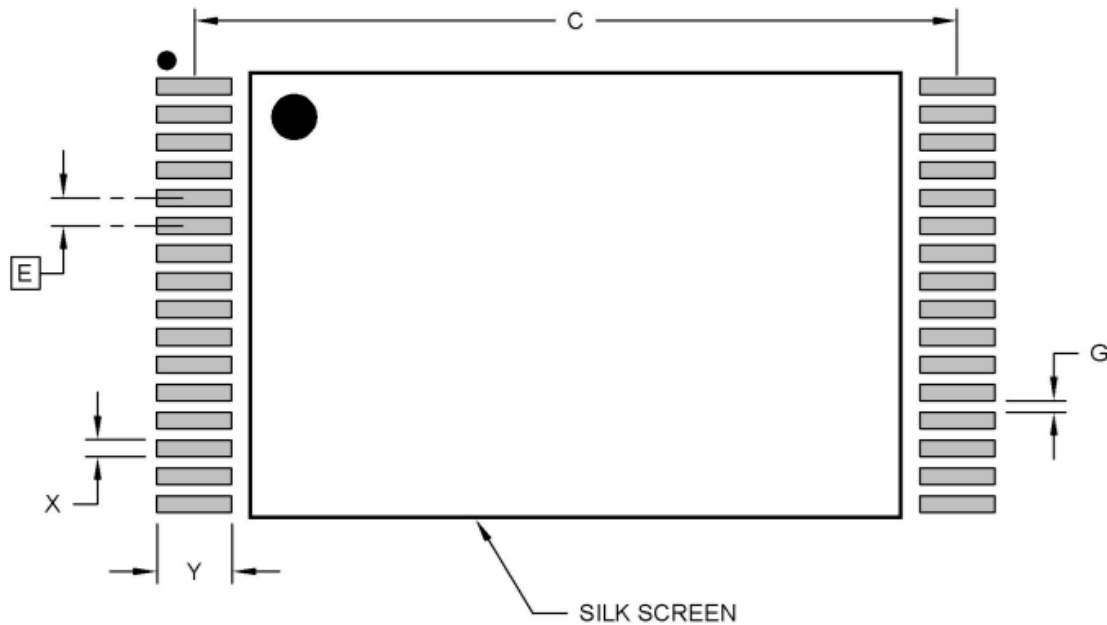
Units		MILLIMETERS		
Dimension Limits		MIN	NOM	MAX
Number of Terminals	N	32		
Pitch	e	0.50 BSC		
Overall Height	A	-	-	1.20
Standoff	A1	0.05	0.10	0.15
Molded Package Thickness	A2	0.95	1.00	1.05
Overall Length	D	13.40 BSC		
Molded Package Length	D1	11.80 BSC		
Overall Width	E	8.00 BSC		
Terminal Thickness	c	-	-	0.21
Terminal Width	b	0.17	-	0.23
Terminal Length	L	0.30	-	0.70
Foot Angle	θ	0°	-	5°

Notes:

1. Pin 1 visual index feature may vary but must be located within the hatched area.
2. Dimensions D1 and E do not include mold flash or protrusions. Mold flash or protrusions shall not exceed 0.15 mm per side.
3. Dimensioning and tolerancing per ASME Y14.5M
 BSC: Basic Dimension. Theoretically exact value shown without tolerances.
 REF: Reference Dimension, usually without tolerance, for information purposes only.

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FIGURE 2-4: RECOMMENDED LAND PATTERN FOR TU PACKAGE



RECOMMENDED LAND PATTERN

Dimension Limits	Units	MILLIMETERS		
		MIN	NOM	MAX
Contact Pitch	E	0.50 BSC		
Contact Pad Spacing	C		12.90	
Contact Pad Width (X32)	X			0.30
Contact Pad Length (X32)	Y			1.30
Contact Pad to Contact Pad (X30)	G1	0.20		

Notes:

1. Dimensioning and tolerancing per ASME Y14.5M

BSC: Basic Dimension. Theoretically exact value shown without tolerances.

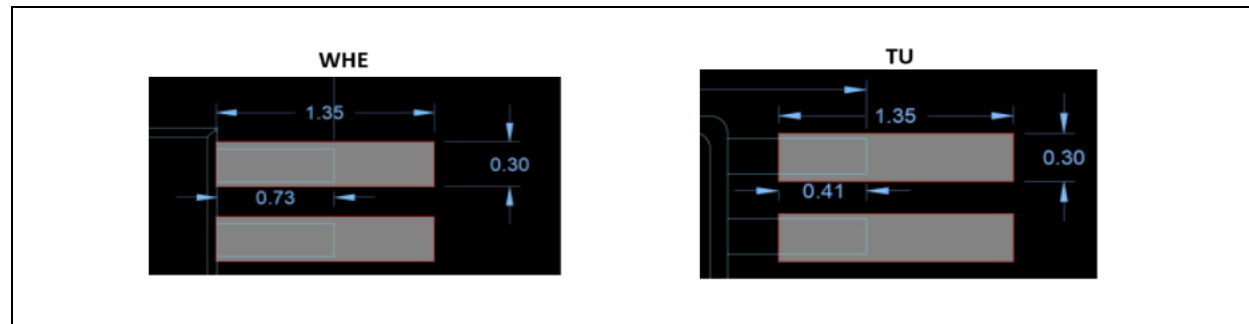
WHE TO TU PACKAGE TYPE MIGRATION

3.0 WHE AND TU PACKAGE COMPARISON

TABLE 3-1: PACKAGE DIMENSION COMPARISON TABLE

Units		Package Type	Millimeters		
Dimension limits			Min	Nom	Max
Number of Terminals	N	WHE	32		
		TU	32		
Pitch	e	WHE	0.50 BSC		
		TU	0.50 BSC		
Overall Height	A	WHE			1.20
		TU			1.20
Standoff	A1	WHE	0.05	0.10	0.15
		TU	0.05	0.10	0.15
Molded Package Thickness	A2	WHE	0.95	1.0	1.05
		TU	0.95	1.0	1.05
Overall Length	D	WHE	14.00 BSC		
		TU	13.40 BSC		
Molded Package Length	D1	WHE	12.40 BSC		
		TU	11.80 BSC		
Overall Width	E	WHE	8.00 BSC		
		TU	8.00 BSC		
Terminal Thickness	c	WHE	0.1		0.21
		TU			0.21
Terminal Width	b	WHE	0.17	0.22	0.27
		TU	0.17	-	0.23
Terminal Length	L	WHE	0.50	0.6	0.70
		TU	0.30		0.70
Foot Angle	Θ	WHE	0 deg	5 deg	8 deg
		TU	0 deg		5 deg

FIGURE 3-1: LAND PATTERN COMPARISON



WHE TO TU PACKAGE TYPE MIGRATION

4.0 ORDERING PART NUMBERS

TABLE 4-1: RECOMMENDED REPLACEMENT

WHE Part Number(EOL)	Recommended TU Part Number
SST39VF010-70-4C-WHE	SST39VF010-70-4C-TU
SST39VF010-70-4C-WHE-T	SST39VF010-70-4C-TU-T
SST39VF010-70-4I-WHE	SST39VF010-70-4I-TU
SST39VF010-70-4I-WHE-T	SST39VF010-70-4I-TU-T
SST39VF020-70-4C-WHE	SST39VF020-70-4C-TU
SST39VF020-70-4C-WHE-T	SST39VF020-70-4C-TU-T
SST39VF020-70-4I-WHE	SST39VF020-70-4I-TU
SST39VF020-70-4I-WHE-T	SST39VF020-70-4I-TU-T
SST39VF040-70-4C-WHE	SST39VF040-70-4C-TU
SST39VF040-70-4C-WHE-T	SST39VF040-70-4C-TU-T
SST39VF040-70-4I-WHE	SST39VF040-70-4I-TU
SST39VF040-70-4I-WHE-T	SST39VF040-70-4I-TU-T
SST49LF008A-33-4C-WHE	SST49LF008A-33-4C-TU
SST49LF008A-33-4C-WHE-T	SST49LF008A-33-4C-TU-T
SST39LF010-55-4C-WHE	SST39LF010-55-4C-TU
SST39LF010-55-4C-WHE-T	SST39LF010-55-4C-TU-T
SST39LF020-55-4C-WHE	SST39LF020-55-4C-TU
SST39LF020-55-4C-WHE-T	SST39LF020-55-4C-TU-T
SST39LF040-55-4C-WHE	SST39LF040-55-4C-TU
SST39LF040-55-4C-WHE-T	SST39LF040-55-4C-TU-T
SST39SF010A-55-4C-WHE	SST39SF010A-55-4C-TU
SST39SF010A-55-4C-WHE-T	SST39SF010A-55-4C-TU-T
SST39SF010A-55-4I-WHE	SST39SF010A-55-4I-TU
SST39SF010A-55-4I-WHE-T	SST39SF010A-55-4I-TU-T
SST39SF010A-70-4C-WHE	SST39SF010A-70-4C-TU
SST39SF010A-70-4C-WHE-T	SST39SF010A-70-4C-TU-T
SST39SF010A-70-4I-WHE	SST39SF010A-70-4I-TU
SST39SF010A-70-4I-WHE-T	SST39SF010A-70-4I-TU-T
SST39SF020A-55-4C-WHE	SST39SF020A-55-4C-TU
SST39SF020A-55-4C-WHE-T	SST39SF020A-55-4C-TU-T
SST39SF020A-55-4I-WHE	SST39SF020A-55-4I-TU
SST39SF020A-55-4I-WHE-T	SST39SF020A-55-4I-TU-T
SST39SF020A-70-4C-WHE	SST39SF020A-70-4C-TU
SST39SF020A-70-4C-WHE-T	SST39SF020A-70-4C-TU-T
SST39SF020A-70-4I-WHE	SST39SF020A-70-4I-TU
SST39SF020A-70-4I-WHE-T	SST39SF020A-70-4I-TU-T
SST39SF040-55-4C-WHE	SST39SF040-55-4C-TU
SST39SF040-55-4C-WHE-T	SST39SF040-55-4C-TU-T
SST39SF040-55-4I-WHE	SST39SF040-55-4I-TU
SST39SF040-55-4I-WHE-T	SST39SF040-55-4I-TU-T
SST39SF040-70-4C-WHE	SST39SF040-70-4C-TU
SST39SF040-70-4C-WHE-T	SST39SF040-70-4C-TU-T
SST39SF040-70-4I-WHE	SST39SF040-70-4I-TU
SST39SF040-70-4I-WHE-T	SST39SF040-70-4I-TU-T

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ISBN: 979-8-3371-0141-5

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