

## ATA6628/30 Errata and Data Sheet Clarifications

The functionality of the ATA6628/30 devices you have received is described in the device Data Sheet 91171-AUTO-10/14 except for the anomalies described in this document.

There are no silicon errata issues for the ATA6628/30. This document contains detailed information in addition to the ATA6628/30 Data Sheet 91171-AUTO-10/14.

There is no change in the die itself.

### 1.0 SILICON ISSUES

None.

### 2.0 DATA SHEET CLARIFICATIONS

In the device data sheet 91171-AUTO-10/14, the following clarifications and supplements should be noted:

#### 2.1 Package Drawing

The package drawings have been updated. They have been converted from the former Atmel style to the Microchip Format. The only dimensions which are different are listed in the following table:

**TABLE 2-1: LIST OF UPDATED DIMENSIONS**

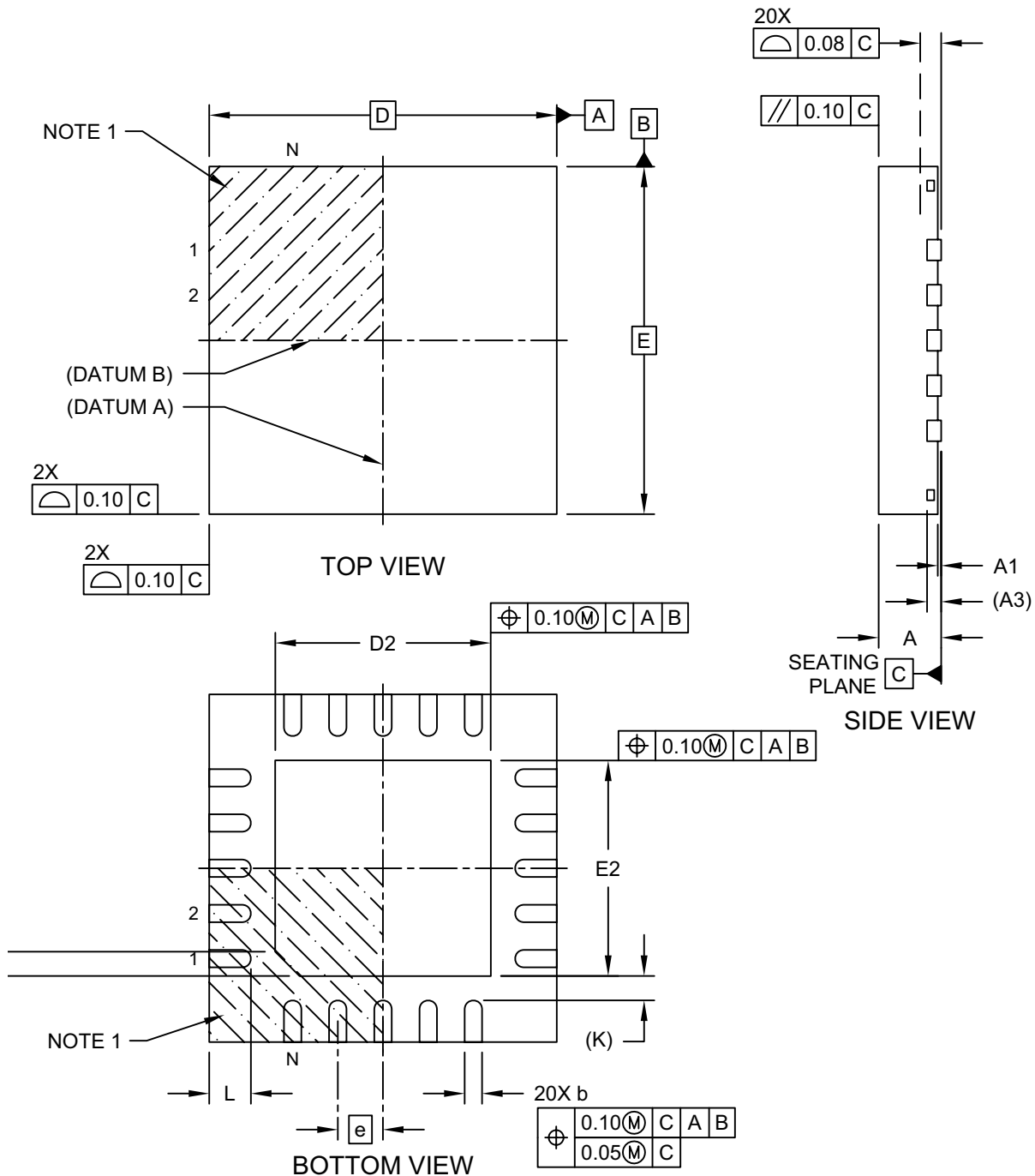
		OLD			NEW			
Dimension	Symbol	Min.	Nom.	Max.	Min.	Nom.	Max.	Units
Overall Height	A	0.80	0.85	0.90	0.80	0.90	1.00	mm

The new package drawings are depicted on pages 2, 3 and 4:

# ATA6628/30

## 20-Lead Very Thin Plastic Quad Flat, No Lead Package (RWB) - 5x5 mm Body [VQFN] With 3.1 mm Exposed Pad, 0.25 mm Terminal Width; Atmel Legacy Global Package Code ZQM

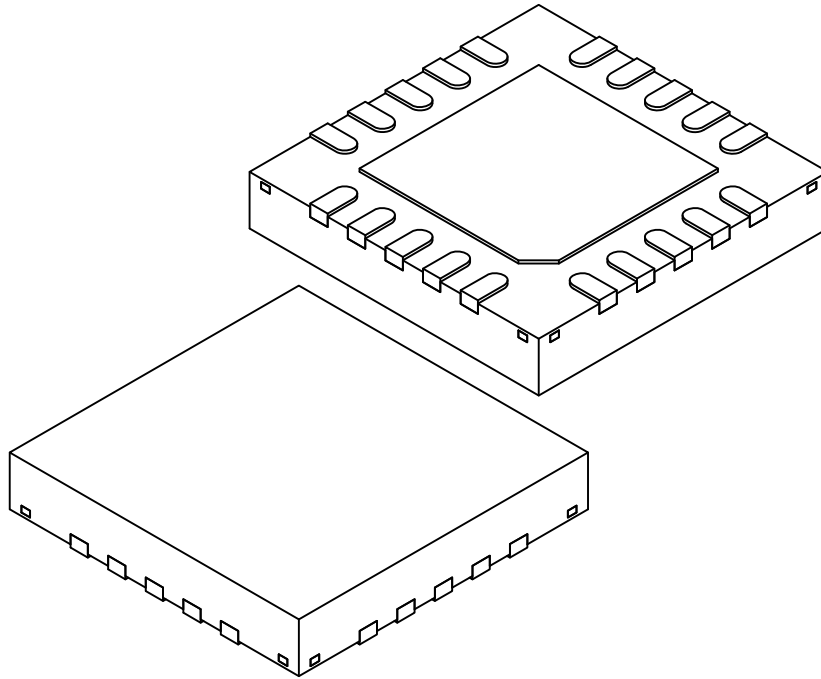
**Note:** For the most current package drawings, please see the Microchip Packaging Specification located at <http://www.microchip.com/packaging>



Microchip Technology Drawing C04-21394 Rev B Sheet 1 of 2

**20-Lead Very Thin Plastic Quad Flat, No Lead Package (RWB) - 5x5 mm Body [VQFN]  
With 3.1 mm Exposed Pad, 0.25 mm Terminal Width; Atmel Legacy Global Package Code ZQM**

**Note:** For the most current package drawings, please see the Microchip Packaging Specification located at <http://www.microchip.com/packaging>



Dimension Limits	Units	MILLIMETERS		
		MIN	NOM	MAX
Number of Terminals	N	20		
Pitch	e	0.65 BSC		
Overall Height	A	0.80	0.90	1.00
Standoff	A1	0.00	0.035	0.05
Terminal Thickness	A3	0.203 REF		
Overall Length	D	5.00 BSC		
Exposed Pad Length	D2	3.00	3.10	3.20
Overall Width	E	5.00 BSC		
Exposed Pad Width	E2	3.00	3.10	3.20
Terminal Width	b	0.20	0.25	0.30
Terminal Length	L	0.55	0.60	0.65
Terminal-to-Exposed-Pad	K	0.35 REF		

**Notes:**

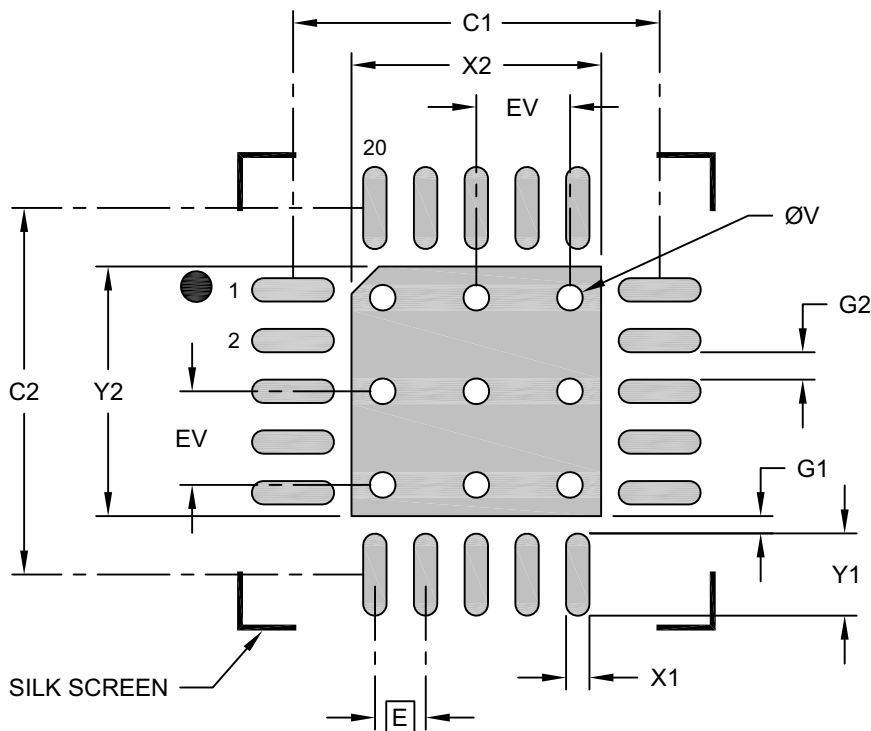
- Pin 1 visual index feature may vary, but must be located within the hatched area.
- Package is saw singulated
- Dimensioning and tolerancing per ASME Y14.5M  
BSC: Basic Dimension. Theoretically exact value shown without tolerances.  
REF: Reference Dimension, usually without tolerance, for information purposes only.

Microchip Technology Drawing C04-21394 Rev B Sheet 1 of 2

# ATA6628/30

## 20-Lead Very Thin Plastic Quad Flat, No Lead Package (RWB) - 5x5 mm Body [VQFN] With 3.1 mm Exposed Pad, 0.25 mm Terminal Width; Atmel Legacy Global Package Code ZQM

**Note:** For the most current package drawings, please see the Microchip Packaging Specification located at <http://www.microchip.com/packaging>



### RECOMMENDED LAND PATTERN

Dimension Limits	Units	MILLIMETERS		
		MIN	NOM	MAX
Contact Pitch	E	0.65 BSC		
Optional Center Pad Width	X2			3.20
Optional Center Pad Length	Y2			3.20
Contact Pad Spacing	C1		4.70	
Contact Pad Spacing	C2		4.70	
Contact Pad Width (X20)	X1			0.30
Contact Pad Length (X20)	Y1			1.05
Contact Pad to Center Pad (X20)	G1	0.23		
Contact Pad to Contact Pad (X16)	G2	0.35		
Thermal Via Diameter	V		0.33	
Thermal Via Pitch	EV		1.20	

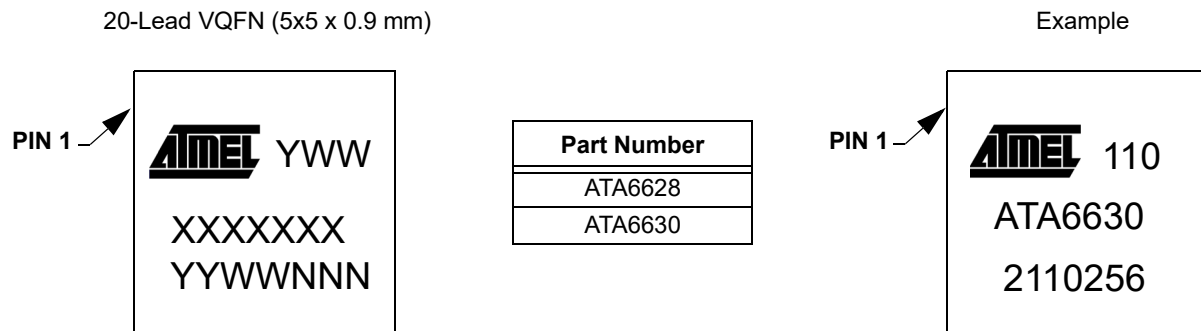
**Notes:**

1. Dimensioning and tolerancing per ASME Y14.5M  
BSC: Basic Dimension. Theoretically exact value shown without tolerances.
2. For best soldering results, thermal vias, if used, should be filled or tented to avoid solder loss during reflow process

Microchip Technology Drawing C04-23394 Rev B

## 2.2 Package Marking Information

In the ATA6628/30 Data Sheet 91171-AUTO-10/14, there is no information regarding the Package Marking. Therefore, the information is listed here:



<b>Legend:</b>	XX...X	Customer-specific information
	Y	Year code (last digit of calendar year)
	YY	Year code (last 2 digits of calendar year)
	WW	Week code (week of January 1 is week '01')
	NNN	Alphanumeric traceability code
	(e3)	Pb-free JEDEC® designator for Matte Tin (Sn)
	*	This package is Pb-free. The Pb-free JEDEC designator (e3) can be found on the outer packaging for this package.
<b>Note:</b> In the event the full Microchip part number cannot be marked on one line, it will be carried over to the next line, thus limiting the number of available characters for customer-specific information.		

# ATA6628/30

## 2.3 Product Identification System

The Product Identification System is also not available in the existing data sheet:

### PRODUCT IDENTIFICATION SYSTEM

To order or obtain information, e.g., on pricing or delivery, refer to the factory or the listed sales office.

<u>PART NO.</u>	<u>XX</u>	<u>X</u>	<u>X</u>
Device	Package	Tape and Reel Option <sup>(1)</sup>	Package Directives Classification <sup>(2)</sup>
<b>Device:</b>	ATA6628 ATA6630		
<b>Package:</b>	GL = 20-Lead VQFN		
<b>Tape and Reel Option:</b>	Q = 330 mm diameter Tape and Reel <sup>(1)</sup>		
<b>Package Directives Classification:</b>	W = Package according to RoHS <sup>(2)</sup>		

**Examples:**

a) ATA6628-GLQW: ATA6628, 20-Lead VQFN package, Tape and Reel, Package according to RoHS, Automotive Qualified

b) ATA6630-GLQW: ATA6630, 20-Lead VQFN package, Tape and Reel, Package according to RoHS, Automotive Qualified

**Note 1:** Tape and Reel identifier only appears in the catalog part number description. This identifier is used for ordering purposes and is not printed on the device package. Check with your Microchip Sales Office for package availability with the Tape and Reel option.

**2:** RoHS compliant, maximum concentration value of 0.09% (900 ppm) for Bromine (Br) and Chlorine (Cl), and less than 0.15% (1500 ppm) total Bromine (Br) and Chlorine (Cl) in any homogeneous material. Maximum concentration value of 0.09% (900 ppm) for Antimony (Sb) in any homogeneous material.

## 2.4 Trademarks Page

The information on [page 9](#) is also not available in the existing data sheet:

## APPENDIX A: DOCUMENT REVISION HISTORY

### Rev. A (March 2020)

- Initial Release of this Document: Errata released as a separate document. This Errata completes the Device Data Sheet 91171-AUTO-10/14 with the following information:
  - Updated Package Drawing and dimensions for the 20-Lead VQFN package.
  - Added Package Marking Information.
  - Added Product Identification System.
  - Updated Microchip Trademarks Page.

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- Microchip products meet the specifications contained in their particular Microchip Data Sheet.
- Microchip believes that its family of products is secure when used in the intended manner and under normal conditions.
- There are dishonest and possibly illegal methods being used in attempts to breach the code protection features of the Microchip devices. We believe that these methods require using the Microchip products in a manner outside the operating specifications contained in Microchip's Data Sheets. Attempts to breach these code protection features, most likely, cannot be accomplished without violating Microchip's intellectual property rights.
- Microchip is willing to work with any customer who is concerned about the integrity of its code.
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