

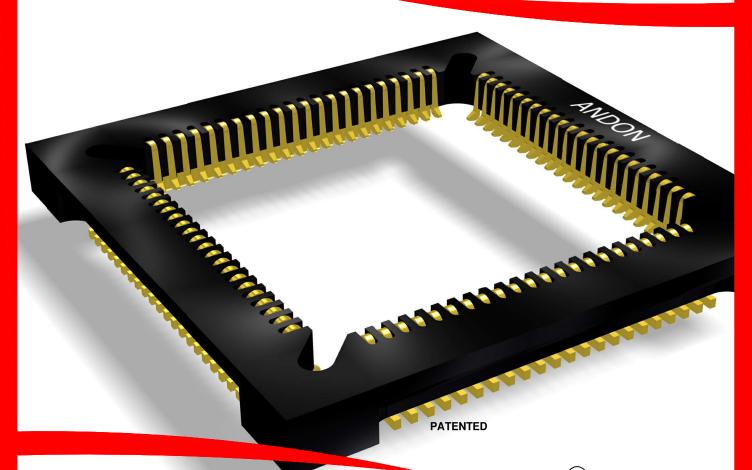






# High-Reliability Image Sensor Sockets for Luxima Technology LLC.





Featuring Andon's Unique Senstac Contact



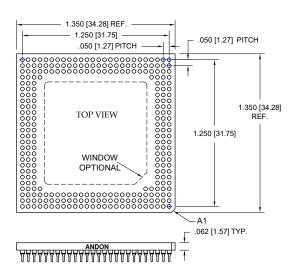


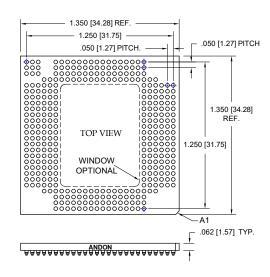




LUXIMA TECHNOLOGY												
LUXIMA TECHNOLOGY	Andon Part Number	Terminal Type				Figure	Page					
Model Number	Replace "XXX" with Terminal Type	Thru-Hole	Surface Mount	Rollerball®	Pin Ø [in]	Number	Number					
AM1X5	10-26-28-281-XXX-R27-L14	274UM	281UM	RB338UM	.012	1	1					
AM1X12	10-26-15-478-XXX-R27-L14	274UM	281UM	RB338UM	.012	7	3					
AM5X3	10-26-15-478-XXX-R27-L14	274UM	281UM	RB338UM	.012	7	3					
AM41	10-26-28-281-XXX-R27-L14	274UM	281UM	RB338UM	.012	1	1					
LUX8M	10-21-11A-203-XXX-R27-L14	274UM	281UM	RB338UM	.012	6	3					
LUX51	10-16-14-209-XXX-R27-L14	274UM	281UM	RB338UM	.012	8	3					
LUX160	10-22-14A-345-XXX-R27-L14	274UM	281UM	RB338UM	.012	5	2					
LUX330	687-88-SM-G10-L14-X	-	-	-	-	3	2					
LUX13HS 237 uPGA	10-22-15A-237-XXX-R27-L14	274UM	281UM	RB338UM	.012	4	2					
LUX13HS 345 uPGA	10-22-14A-345-XXX-R27-L14	274UM	281UM	RB338UM	.012	5	2					
LUX13HS 361 uPGA	10-26-32A-361-XXX-R27-L14	274UM	281UM	RB338UM	.012	2	1					
LUX1310	687-88-SM-G10-L14-X	-	-	-	-	3	2					
LUX1310-S	687-88-SM-G10-L14-X	-	-	-	-	3	2					
LUX19HS	10-22-14A-345-XXX-R27-L14	274UM	281UM	RB338UM	.012	5	2					
LUX2100	10-21-11A-203-XXX-R27-L14	274UM	281UM	RB338UM	.012	6	3					
LUX2810	10-16-13-238-XXX-R27-L14	274UM	281UM	RB338UM	.012	9	3					
LUX4210	694-00692-XX-XXX-R27-L14	TH-491	SM-500	SM-RB593	-	10	4					
LUX9512	694-00712-XX-XXX-R27-L14	TH-491	SM-500	SM-RB593	-	11	4					

See last page for other mounting types including low profile options. Heat sink socket available to reduce heat and noise. Contact Andon for details.





**Fig. 1** 281 Pins

Thru-Hole: 10-26-28-281-274UM-R27-L14
Surface Mount: 10-26-28-281-281UM-R27-L14
Rollerball®: 10-26-28-281-RB338UM-R27-L14
PART NUMBER WITH OPTIONAL WINDOW

Thru-Hole: 10-26-28A-281-274UM-R27-L14 (With Window)
Surface Mount: 10-26-28A-281-281UM-R27-L14 (With Window)
Rollerball®: 10-26-28A-281-RB338UM-R27-L14 (With Window)

Fig. 2 361 Pins

Thru-Hole: 10-26-32-361-274UM-R27-L14

Surface Mount: 10-26-32-361-281UM-R27-L14

Rollerball®: 10-26-32-361-RB338UM-R27-L14

PART NUMBER WITH OPTIONAL WINDOW

Thru-Hole: 10-26-32A-361-274UM-R27-L14 (With Window)
Surface Mount: 10-26-32A-361-281UM-R27-L14 (With Window)
Rollerball®: 10-26-32A-361-RB338UM-R27-L14 (With Window)

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Rollerball® U.S. PATENTED CANADIAN PATENTED

RoHS Compliant
Andon Proprietary Information







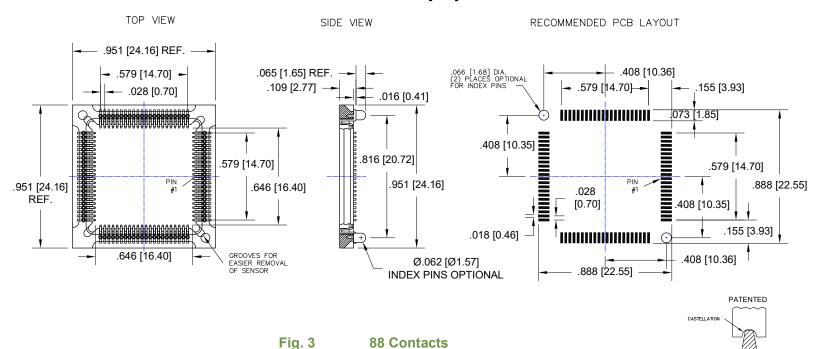


US PAT# 5,588,847

#### **LUXIMA TECHNOLOGY/ ALEXIMA** Continued

#### **Image Sensor Socket Footprints**

Units: in [mm]



Surface Mount: 687-88-SM-G10-L14-X

Contact Plating = Gold

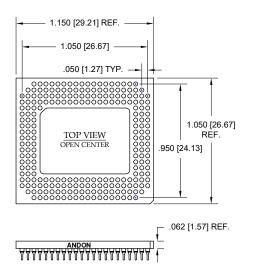


Fig. 4 237 Pins

Thru-Hole: 10-22-15A-237-274UM-R27-L14

Surface Mount: 10-22-15A-237-281UM-R27-L14

Rollerball®: 10-22-15A-237-RB338UM-R27-L14

Fig. 5 345 Pins

Replace "-X" with "-1" for

index pins or "-0" for none

Thru-Hole: 10-22-14A-345-274UM-R27-L14
Surface Mount: 10-22-14A-345-281UMR27-L14
Rollerball®: 10-22-14A-345-RB338UM-R27-L14

Rollerball<sup>®</sup> U.S. PATENTED CANADIAN PATENTED RoHS Compliant
Andon Proprietary Information

\*Sockets are not drawn to scale LUXIMA TECHNOLOGY 03/17/2025

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#### **LUXIMA TECHNOLOGY/ ALEXIMA** Continued

#### **Socket Terminal Details** Units: in [mm]

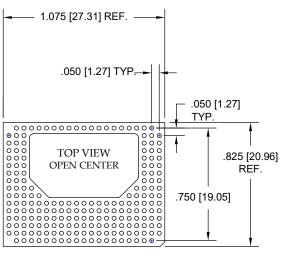
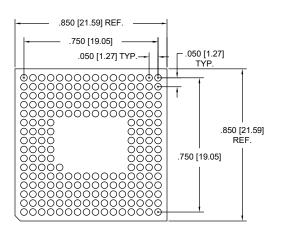
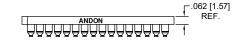




Fig. 6 203 Pins

Thru-Hole: 10-21-11A-203-274UM-R27-L14 Surface Mount: 10-21-11A-203-281UM-R27-L14 Rollerball®: 10-21-11A-203-RB338UM-R27-L14





#### Fig. 8 **209 Pins**

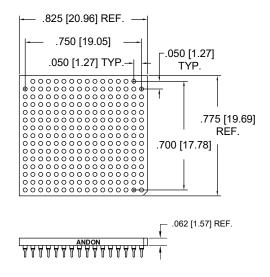
Thru-Hole: 10-16-14-209-274UM-R27-L14 Surface Mount: 10-16-14-209-281UM-R27-L14 Rollerball®: 10-16-14-209-RB338UM-R27-L14

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## 1.325 [33.66] REF. 1.250 [31.75] .050 [1.27] TYP. .050 [1.27] TYP. 1.325 [33.66] REF. TOP VIEW 1.250 [31.75] OPEN CENTER \_.062 [1.57] REF.

#### Fig. 7 478 Pins

Thru-Hole: 10-26-15-478-274UM-R27-L14 Surface Mount: 10-26-15-478-281UM-R27-L14 Rollerball®: 10-26-15-478-RB338UM-R27-L14



#### Fig. 9 238 Pins

Thru-Hole: 10-16-13-238-274UM-R27-L14 Surface Mount: 10-16-13-238-281UM-R27-L14 Rollerball®: 10-16-13-238-RB338UM-R27-L14

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**RoHS Compliant Andon Proprietary Information** 



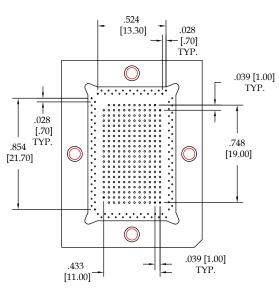


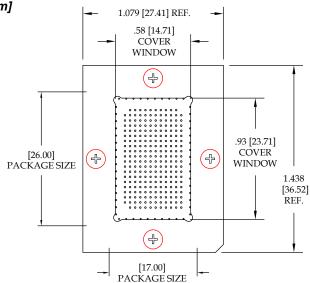




#### **LUXIMA TECHNOLOGY/ ALEXIMA** Continued

# Socket Terminal Details Units: in [mm]



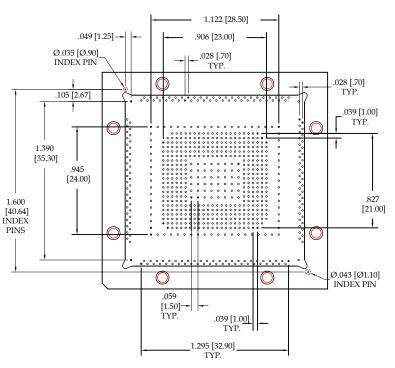


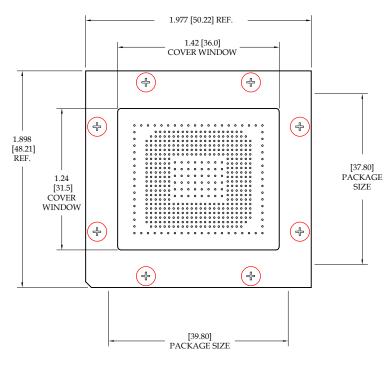
**GUIDE & BASE SHOWN** 

Fig. 10 341 Pins

**COVER & HARDWARE SHOWN** 

Thru-Hole: 694-00692-TH-491-R27-L14-1
Surface Mount: 694-00692-SM-500-R27-L14-1
Rollerball<sup>®</sup>: 694-00692-SM-RB593-R27-L14-1





GUIDE & BASE SHOWN

**COVER & HARDWARE SHOWN** 

Fig. 11 696 Pins

Thru-Hole: 694-00712-TH-491-R27-L14-1
Surface Mount: 694-00712-SM-500-R27-L14-1
Rollerball<sup>®</sup>: 694-00712-SM-RB593-R27-L14-1

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#### **Terminals**





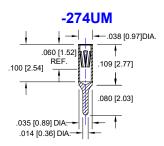


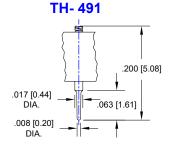
#### **LUXIMA TECHNOLOGY/ ALEXIMA** Continued

#### **Socket Terminal Details**

Cross Section View Shown Units: in[mm]

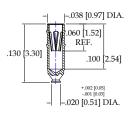
#### THRU HOLE OPTION



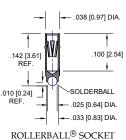


#### **SURFACE MOUNT OPTION**

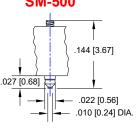
#### -281UM



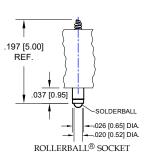




#### **SM-500**



#### **SM-RB593**



#### **Technical Information**

Material:

Plating RRHS COMPLIANT

Insulator: Hi-Temp UL 94V-O Terminal: Brass, per ASTM-B16 Contact: BeCu, Per ASTM-B194 R27 TERMINAL: GOLD / CONTACT: GOLD

R29 TERMINAL: MATTE TIN / CONTACT: GOLD R32 TERMINAL: MATTE TIN / CONTACT: TIN

**OTHER PLATINGS AVAILABLE** 

Terminal Acceptance and Forces per Contact											
Thru Hole Terminals				Surface Mount Terminals							
Thru Hole Terminal	Accepts Pin Diameter	Insertion Force	Withdrawal Force	Surface Mount Terminal	Accepts Pin Diameter	Insertion Force	Withdrawal Force				
-274UM	Ø.018 [Ø0.46]	2.1 oz Avg.	0.53 oz Min	-281UM	Ø.018 [Ø0.46]	2.1 oz Avg.	0.53 oz Min				
				_RB338UM	Ø.018 [Ø0.46]	2.1 oz Avg.	0.53 oz Min				
FCB											

**MOUNTING OPTIONS** PCB PCB PCB THRU-HOLE Rollerball PRE-SOLDER FLOW SURFACE MOUNT PCB PCB ULTRA I OW PROFILE THRU-HOLE Rollerball THRU-HOLE POST-SOLDER FLOW Rollerball® U.S. PATENT CANADIAN PATENT

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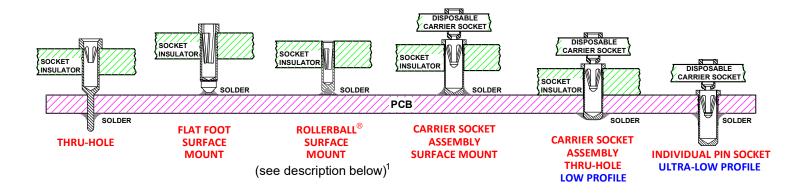


#### Socket &Terminal **Options**





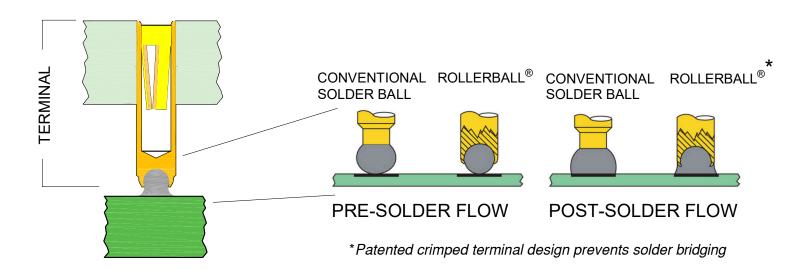




<sup>1</sup>Andon's patented Rollerball<sup>®</sup> socket terminal option provides more accurate soldering, a stronger connection, and improved electrical connectivity - especially under shock and vibration - than other solder ball terminal designs. Better yet, it can enable you to avoid expensive rework and scrap especially with larger PCBs where coplanarity is an inherent challenge.

The bottom of these terminals has a radiused hole, to prevent gas entrapment. The terminal is crimped over the solder ball beyond its hemisphere, encapsulating it - leaving just enough of the solder ball exposed to provide sufficient solder without the solder bridging common in conventional solder ball terminal designs.

With this unique design, the critical distance between the terminal and the PC board pad is typically reduced from .036"-.040" to .018"-.022". As such, the solder becomes part of the "anchor" cross-section - providing additional mechanical strength to the connection, as well as improved electrical connectivity. Because it also provides controlled dispersion of solder, this encapsulated solder ball reduces the risk of solder bridging inherent in conventional solder ball terminal designs.



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**RoHS Compliant Andon Proprietary Information** \*Sockets are not drawn to scale LUXIMA TECHNOLOGY 03/17/2025



# Carrier Assembly Configurations







#### For fast, accurate placement of SIP sockets and ultra-low profile terminals

Phase 1: Receive Carrier Assemblies designed to your pin layout.



Phase 2: Place carrier assemblies onto PCB; run through your soldering process.

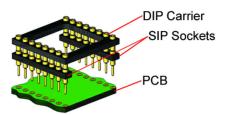


Phase 3: Remove carrier and plug in your device;

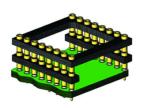
discard carrier.

DIP

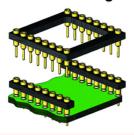
**Before Soldering** 



### **During Soldering**

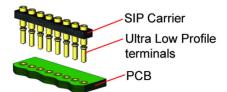


After Soldering



#### **ULTRA-LOW PROFILE SIP**

**Before Soldering** 



#### **During Soldering**

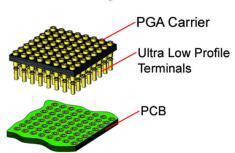


**After Soldering** 



#### **ULTRA-LOW PROFILE PGA**

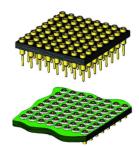
**Before Soldering** 



During Soldering

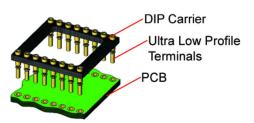


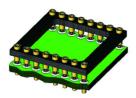
**After Soldering** 



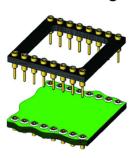
# ULTRA LOW PROFILE DIP During Soldering

**Before Soldering** 





**After Soldering** 



Andon Proprietary Information RoHS Compliant