XGS 16000, XGS 12000, XGS9400, XGS 8000, XGS 5000, XGS 3000 and XGS 2000 Image Sensors Soldering Information

AN52561-ADD/D

APPLICATION NOTE ABSTRACT

This application note addendum integrates the information provided in the document AN52561/D ”Image Sensor Handling and Best Practices”. It describes minimal methods for customers to solder XGS 16000, XGS 12000, XGS9400, XGS 8000, XGS 5000, XGS 3000 and XGS 2000 image sensors. It integrates the information provided in the document AN52561/D ”Image Sensor Handling and Best Practices”.

Disclaimer

onsemi is not responsible for damage caused by improper handling or cleaning of the device after it is received by the customer.

SENSOR SOLDERING CONSIDERATIONS

Solder Paste, Flux and Stencil

For details refer to applicable device datasheet. The flux type should be no-clean and Halide-free (no corrosive residue is allowed).

Solder paste:

- Type 4 spherical shape 20−38μ
- Composition: Sn96.5 – Ag3.0 – Cu0.5
- Halide free

Flux:

- Flux type: ROL0 or ROL1
- Flux content 11.5%
- No−clean flux
- Halide free and ROHS compliant

When using a stencil, here are the characteristics of the recommended one:

- Standard stainless steel
- Minimum Thickness 100μ
- Aperture size: 600 μm for central pads and 1200 μm x 1200 μm for anchor pads (75%)

Reflow Profile

In general, reflow profile considerations rely upon PCB material, solder paste manufacturer recommendations and the other electronic components on the same board. The package thickness and volume can affect the reflow profile requirement. Refer to the package dimensions on the product datasheet and the JEDEC Standard J−STD−020−01[6].

Image Sensors parts may be moisture sensitive; use proper handling and baking techniques according to the moisture sensitivity classification IPC/JEDEC J−STD−033[7].

PUBLICATION ORDERING INFORMATION

LITERATURE FULFILLMENT:
Email Requests to: orderlit@onsemi.com

onsemi Website: www.onsemi.com

TECHNICAL SUPPORT
North American Technical Support:
Voice Mail: 1 800−282−9855 Toll Free USA/Canada
Phone: 011 421 33 790 2910

Europe, Middle East and Africa Technical Support:
Phone: 00421 33 790 2910
For additional information, please contact your local Sales Representative

◊