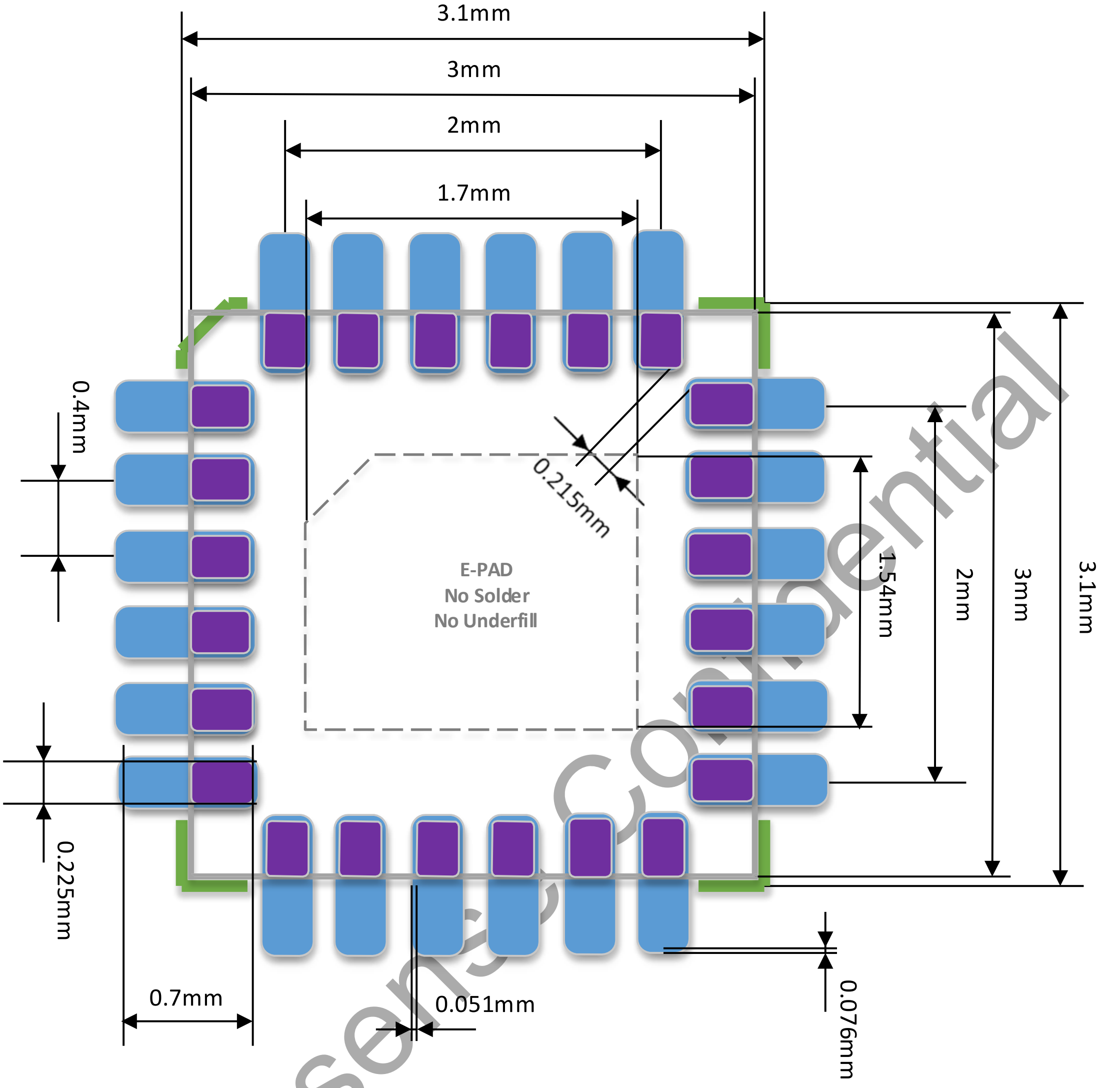
MPU-65xx/MPU-92xx/ICM-206xx
QFN Footprint Recommendation

Invensense Confidential



Invensense Confidential

Device Dimensions Supported By This Footprint:
MPU-65xx – 3mm x 3 mm x 0.9 mm
MPU-92xx – 3 mm x 3 mm x 1 mm
ICM-206xx – 3 mm x 3 mm x 0.75 mm

Component Leads: 0.3 mm x 0.2 mm
Silkscreen Outline Dimensions: 3.1 mm x 3.1 mm
Pin Pad Dimensions: 0.225 mm x 0.7 mm (oblong)
Solder Mask Dimensions: 0.33mm x 0.85mm

Notes:
The recommended PCB footprint for MPU-65xx/MPU-92xx/ICM-206xx was chosen large enough to offer ***ease of use, provide reliable contact with the sensor package pin pads, support hand-solder, probing and debugging capabilities*** for all 3 mm x 3 mm QFN packages (independent of height).

The individual ***PCB land pattern shapes*** for the QFN footprint in this design are ***oblong*** with ~8mil clearance between corner pad, which helps to avoid bridging in the corner areas during reflow soldering while maintaining a maximum connectivity area between package pin pad and QFN PCB footprint.

Solder mask (layer of protective coating for PCB's copper traces, which helps to prevent undesired solder bridges and shorts) dimensions have been included in this drawing, but are not usually given as part of the layout information as they are ***dependent upon the manufacturing process and the clearance capabilities of the chosen fabrication house*** (PCB vendor).

REVISION HISTORY

REVISION DATE	REVISION	DESCRIPTION
5/2/2014	1.0	Initial Release

InvenSense Confidential

This information furnished by InvenSense is believed to be accurate and reliable. However, no responsibility is assumed by InvenSense for its use, or for any infringements of patents or other rights of third parties that may result from its use. Specifications are subject to change without notice. InvenSense reserves the right to make changes to this product, including its circuits and software, in order to improve its design and/or performance, without prior notice. InvenSense makes no warranties, neither expressed nor implied, regarding the information and specifications contained in this document. InvenSense assumes no responsibility for any claims or damages arising from information contained in this document, or from the use of products and services detailed therein. This includes, but is not limited to, claims or damages based on the infringement of patents, copyrights, mask work and/or other intellectual property rights.

Certain intellectual property owned by InvenSense and described in this document is patent protected. No license is granted by implication or otherwise under any patent or patent rights of InvenSense. This publication supersedes and replaces all information previously supplied. Trademarks that are registered trademarks are the property of their respective companies. InvenSense sensors should not be used or sold in the development, storage, production or utilization of any conventional or mass-destructive weapons or for any other weapons or life threatening applications, as well as in any other life critical applications such as medical equipment, transportation, aerospace and nuclear instruments, undersea equipment, power plant equipment, disaster prevention and crime prevention equipment.

©2014 InvenSense, Inc. All rights reserved. InvenSense, MotionTracking, MotionProcessing, MotionProcessor, MotionFusion, MotionApps, DMP, and the InvenSense logo are trademarks of InvenSense, Inc. Other company and product names may be trademarks of the respective companies with which they are associated.

InvenSense

©2014 InvenSense, Inc. All rights reserved.