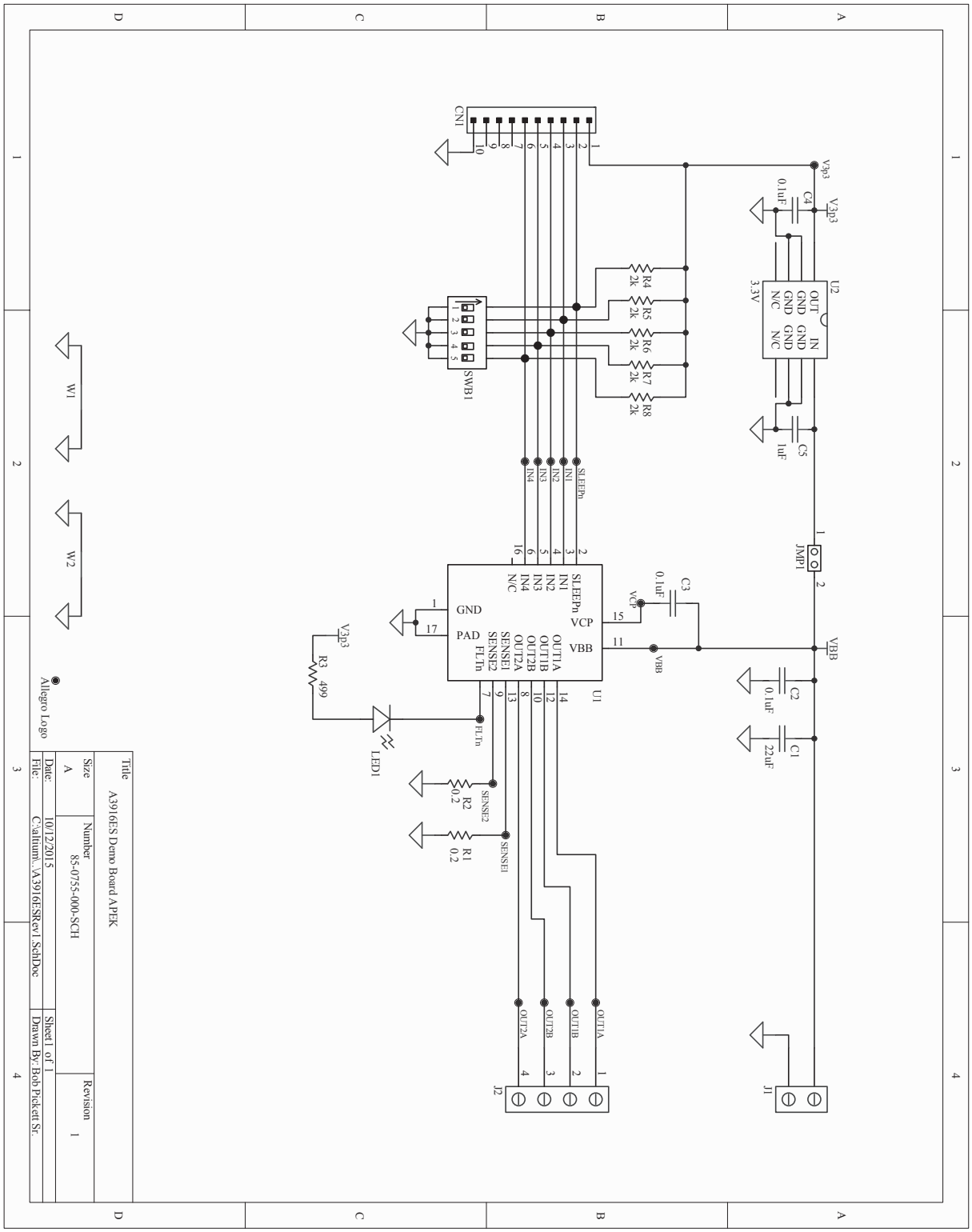
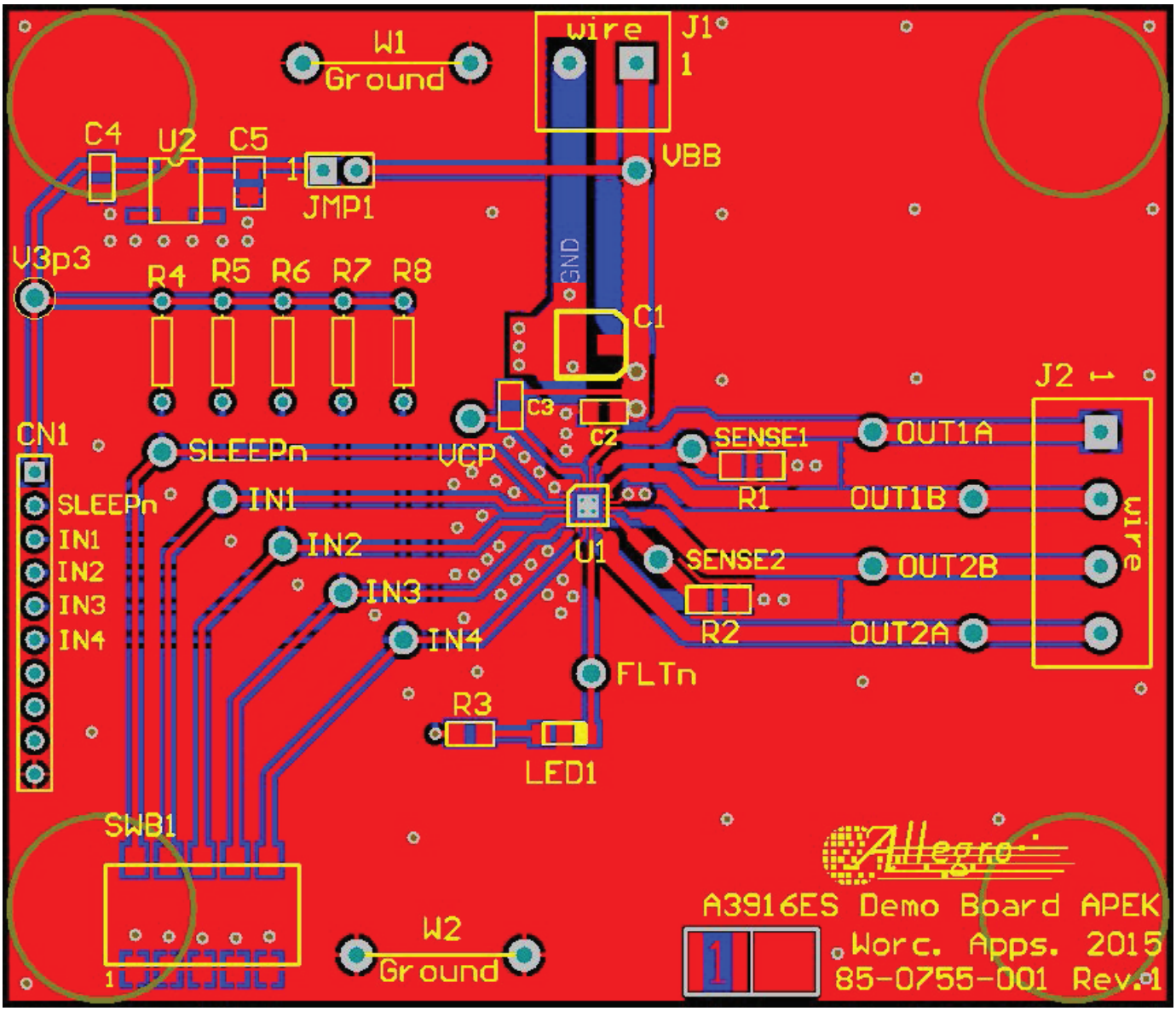
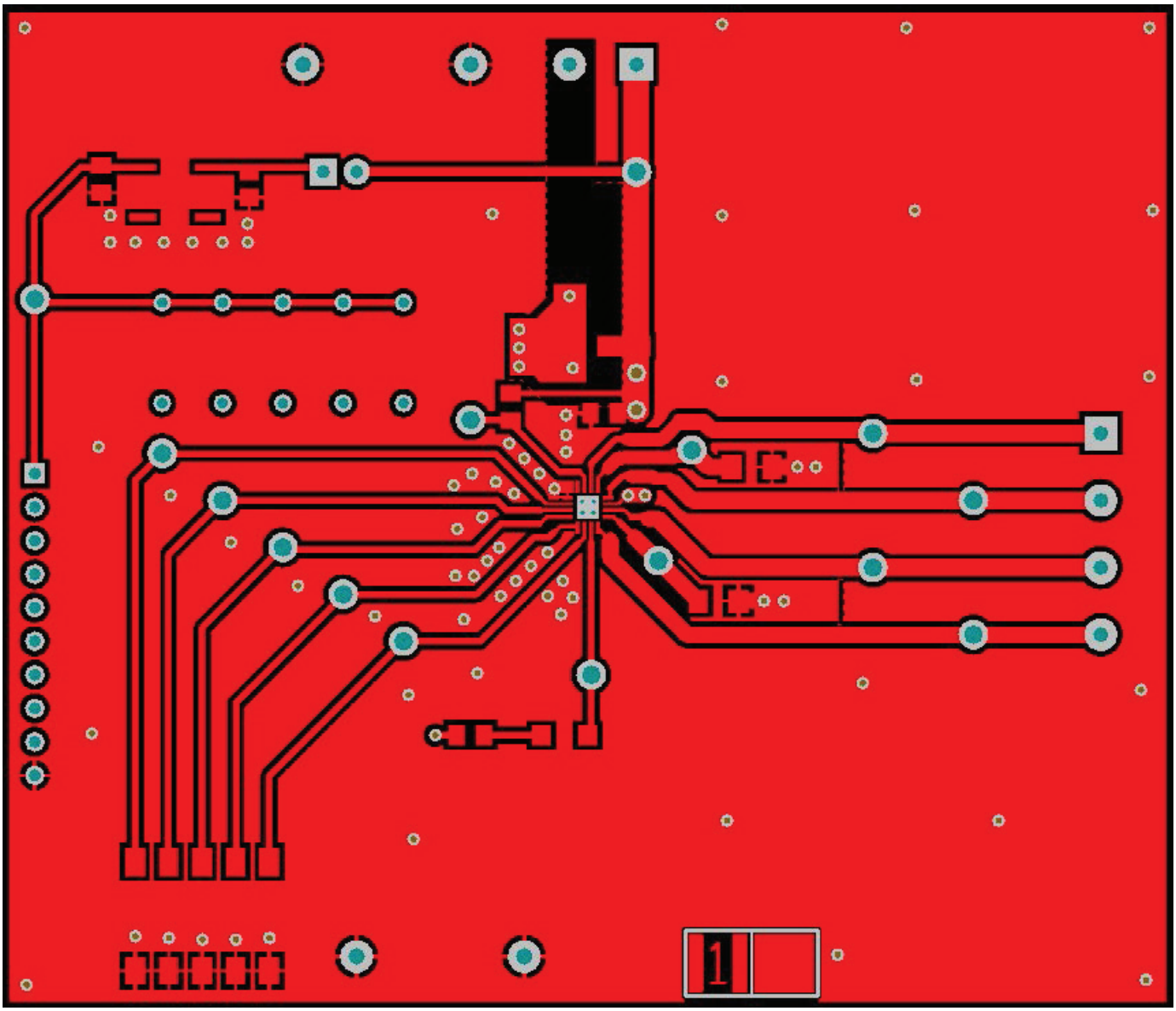
Demo Board Schematic/Layout

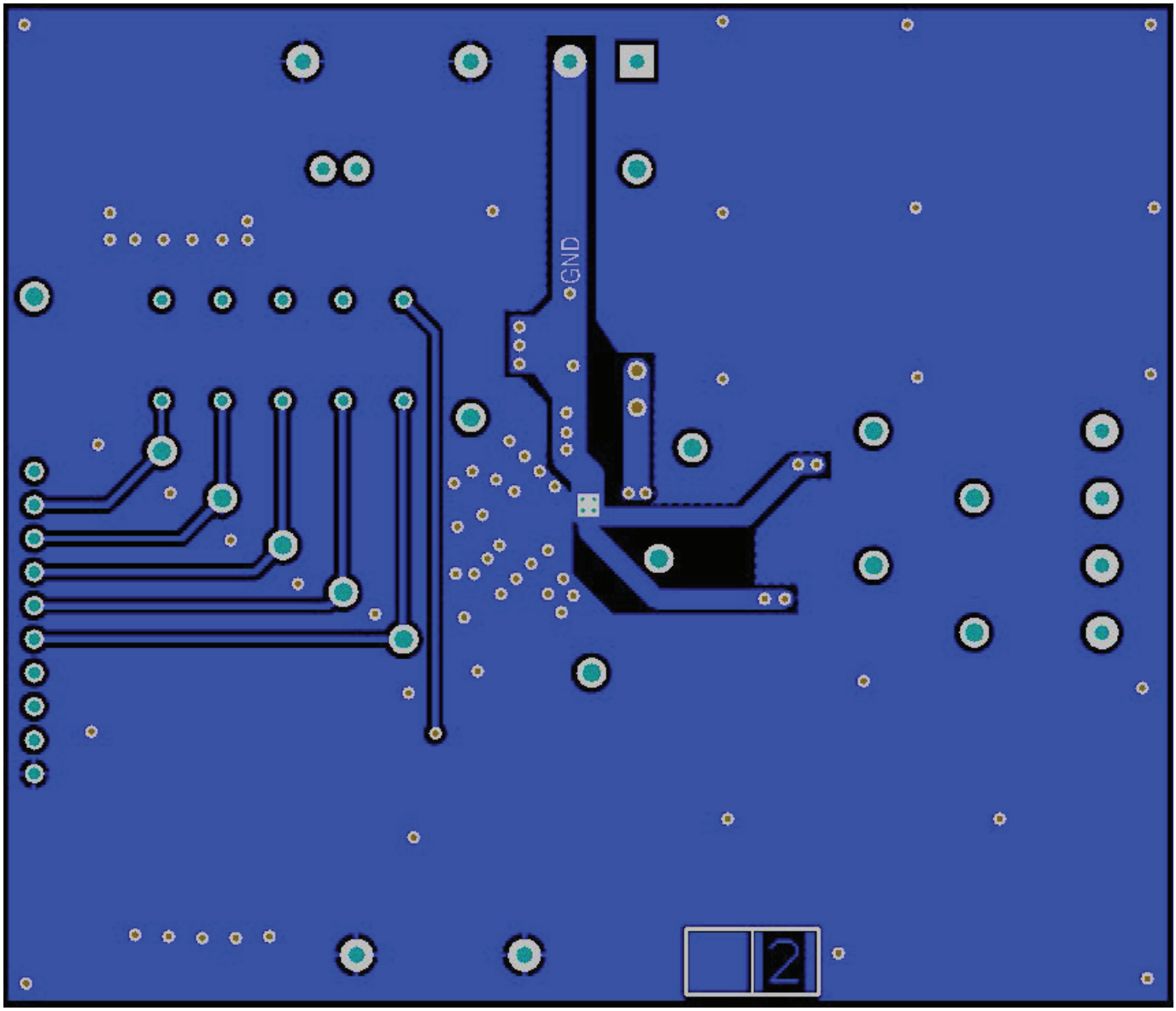
SCHEMATIC



LAYOUT


W1
Ground
wire
J1
1
C4
U2
C5
1
JMP1
VBB
V3p3
R4
R5
R6
R7
R8
GND
C1
J2
1
C3
C2
CN1
SLEEPn
VCP
SENSE1
OUT1A
SLEEPn
IN1
R1
OUT1B
IN1
IN2
IN2
U1
SENSE2
OUT2B
IN3
IN3
IN4
R2
OUT2A
IN4
FLTn
R3
LED1
SWB1
Allegro
A3916ES Demo Board APEK
Worc. Apps. 2015
85-0755-001 Rev.1
W2
Ground
1


1


GND
2

BILL OF MATERIALS

Item	Quantity	Designator	value	Description	PartType	Footprint
1	1	C1	22uF	25V Capacitor	Chemi-Con EMVA250ADA220ME55G; Digikey 565-2101-1-ND	UCC E55 CAP
2	3	C2, C3, C4	0.1uF	25V Capacitor	Kemet C0805C104K3RACTU; Digikey 399-1168-1-ND	0805
3	1	C5	1uF	50V Capacitor	Taiyo Yuden UMK212BJ105KG-T; Digikey 587-2229-1-ND	0805
4	12 Pins	CN1, JMP1		Cut pins from 50-pin strip.	Samtec TSW-150-07-T-S; Digikey SAM1035-50-ND	2-pos. shunt, 10pinUSBConn
5	15	FLTn, IN1, IN2, IN3, IN4, OUT1A, OUT1B, OUT2A, OUT2B, SENSE1, SENSE2, SLEEPn, V3p3, VBB, VCP		Large Test Point	Keystone Electronics 5010; Digikey 5010K-ND	PAD 57 125 TP HB
6	4			Bumpon Foot	3M SJ-5303 (CLEAR); Digikey SJ5303-7-ND	Bumpon Foot
7	1	J1		2-Pin Screw Down Connector	On Shore Technology ED120/2DS; Digikey ED1609-ND	2-pin screw down connector2
8	1	J2		4-Pin Screw Down Terminal Block	On Shore ED120/4DS; Digikey ED2227-ND	4-pin screw down connector
9	1	LED1		Red Surface-mount LED	Lite-On LTST-C150CKT; Digikey 160-1167-1-ND	1206 LED
10				pcb	85-0755-001 Rev. 1	
11	2	R1, R2	0.2	1/4W Resistor	Vishay/Dale WSL1206R2000FEA; Digikey WSLC-.20CT-ND	1206
12	1	R3	499	1/8W Resistor	Stackpole RMCF0805FT499R;Digikey RMCF0805FT499RCT-ND	0805
13	5	R4, R5, R6, R7, R8	2k	1/8W Resistor	Stackpole RNF18FTD2K00; Digkey RNF18FTD2K00CT-ND	AXIAL-0.3
14	1	SWB1		5-Position SPST Switches	C&K Components SDA05H0SBD; Digikey CKN6072-ND	SDA05H0SBD
15	1	U1		Dual DMOS Full-Bridge Motor Driver	A3916ES	ES-16
16	1	U2	3.3V	3.3V LDO	ST L78L33ACD13TR; Digikey 497-1199-1-ND	8-Pin SO
17	2	W1, W2		22 Gauge Buss Wire (300mils above pcb)		Scope Ground

Revision History

Number	Date	Description
–	September 26, 2016	Initial release

Copyright ©2016, Allegro MicroSystems, LLC

Allegro MicroSystems, LLC reserves the right to make, from time to time, such departures from the detail specifications as may be required to permit improvements in the performance, reliability, or manufacturability of its products. Before placing an order, the user is cautioned to verify that the information being relied upon is current.

Allegro's products are not to be used in any devices or systems, including but not limited to life support devices or systems, in which a failure of Allegro's product can reasonably be expected to cause bodily harm.

The information included herein is believed to be accurate and reliable. However, Allegro MicroSystems, LLC assumes no responsibility for its use; nor for any infringement of patents or other rights of third parties which may result from its use.

For the latest version of this document, visit our website:

www.allegromicro.com