

AMIS-30532

Block DIAGRAM

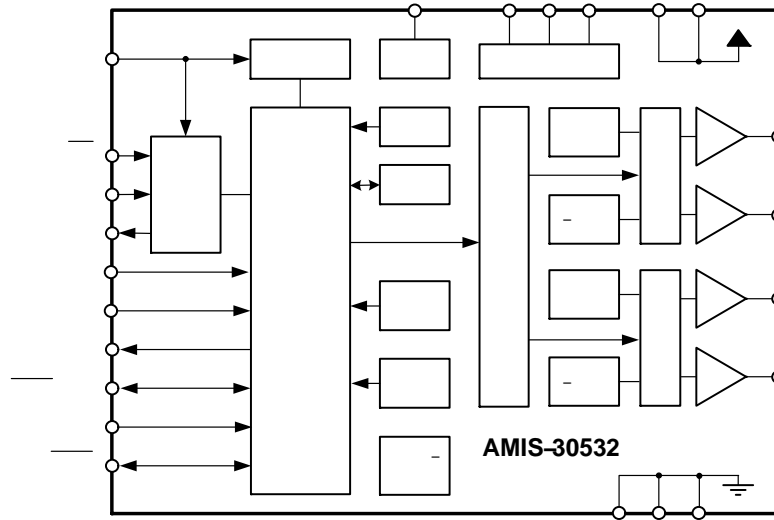
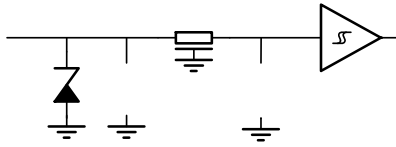


Figure 1. Block Diagram AMIS-30532

Table 1. PIN LIST AND DESCRIPTION

Name	Pin	Description	Type	Equivalent Schematic

EQUIVALENT SCHEMATICS



AMIS-30532

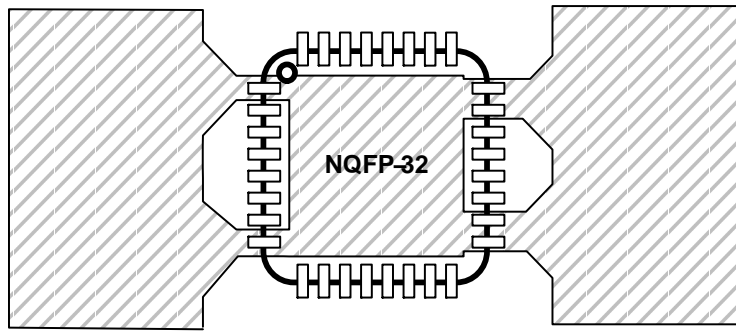


Figure 4. Example of NQFP-32 PCB Ground Plane Layout in Top View (Preferred Layout at Top and Bottom)

ELECTRICAL SPECIFICATION

Recommend Operation Conditions

AMIS-30532

Table 5. DC PARAMETERS

Symbol	Pin(s)	Parameter	Remark/Test Conditions	Min	Typ	Max	Unit
--------	--------	-----------	------------------------	-----	-----	-----	------

DIGITAL OUTPUTS

--	--	--	--	--	--	--	--

AMIS-30532

Table 6. AC PARAMETERS

Symbol	Pin(s)	Parameter	Remark/Test Conditions	Min	Typ	Max	Unit
INTERNAL OSCILLATOR							

MOTORDRIVER

--

AMIS-30532

TYPICAL APPLICATION SCHEMATIC

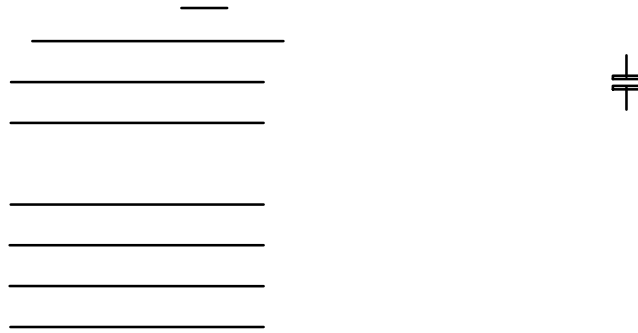


Figure 7. Typical Application Schematic AMIS-30532

FUNCTIONAL DESCRIPTION

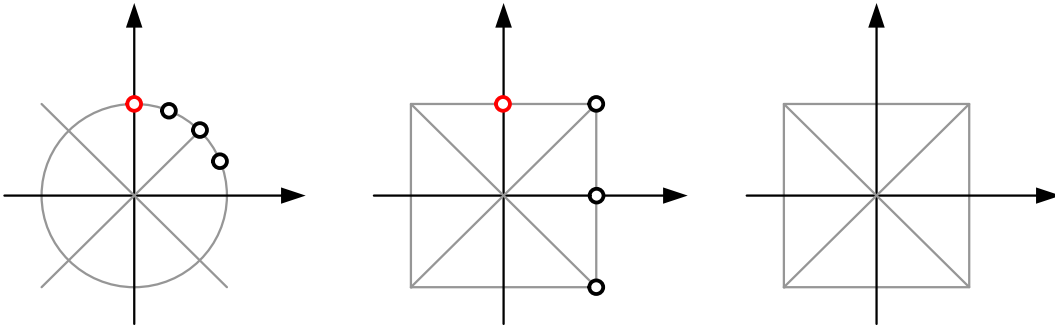
H-Bridge Drivers

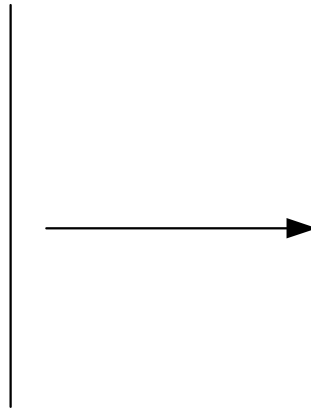
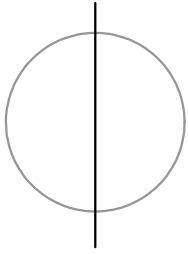
—
— —
— —
<MOTEN>

—
—

Table 11. CIRCULAR TRANSLATOR TABLE (CONTINUED)

MSP[6:0]





Speed and Load Angle Output

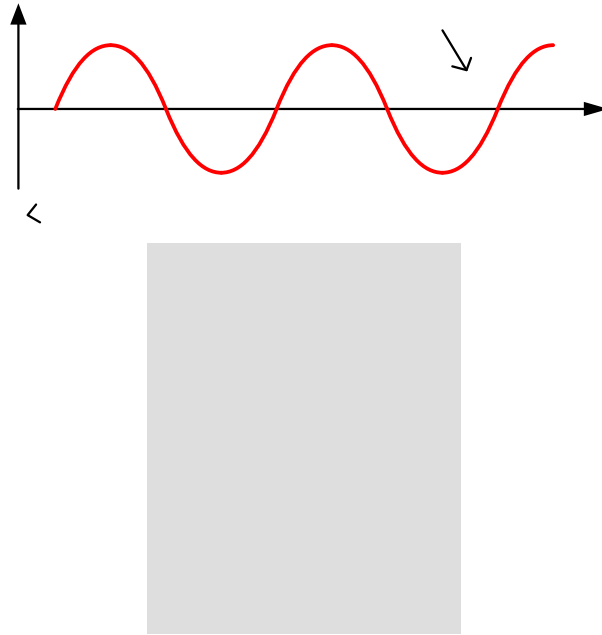
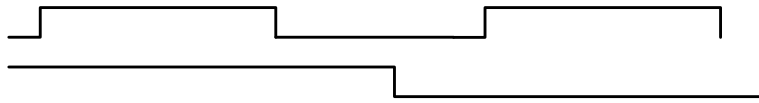


Figure 14. Principle of BEMF Measurement



Error Output

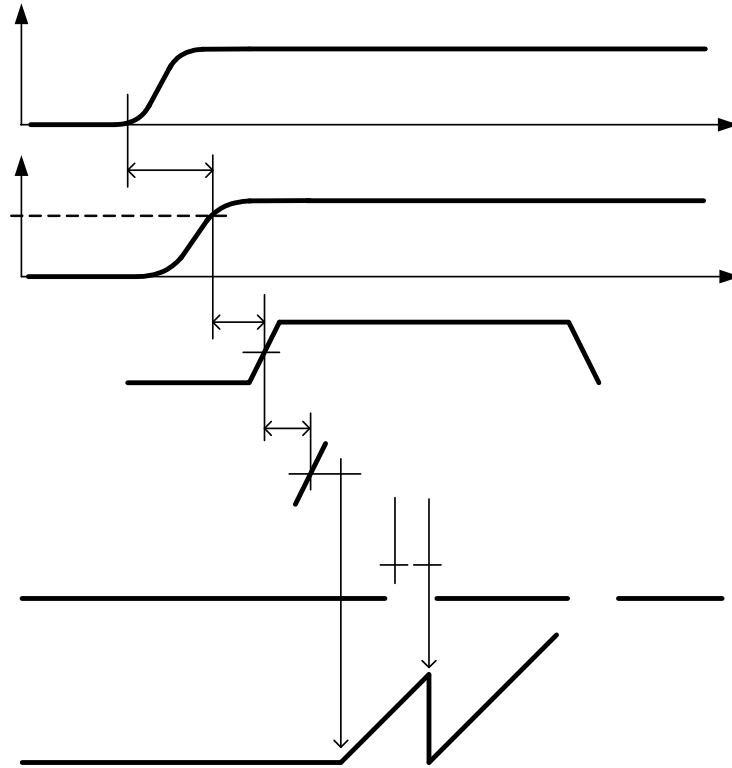
Power-On Reset (POR) Function

<OVCYij> <TW> <TSD> <OVCXij>
<OPENi> <CPFAIL>

Logic Supply Regulator

- - -

<SLP>



SPI Transfer Format and Pin Signals

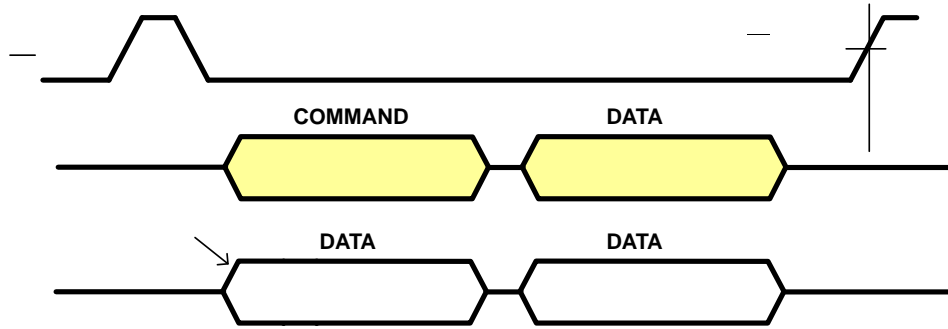


Figure 21. Single WRITE Operation where DATA from the Master is written in SPI register with Address 3

Examples of Combined READ and WRITE Operations

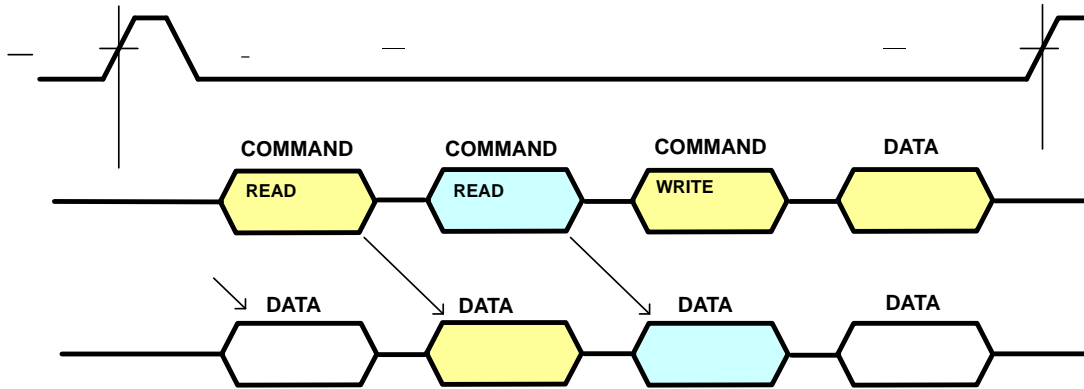


Figure 22. 2 Successive READ Commands Followed by a WRITE Command

Table 14. SPI CONTROL PARAMETER OVERVIEW

CUR[4:0] Selects IMCmax

Table 17. SPI STATUS FLAGS OVERVIEW

Mnemonic	Flag	Length (bit)	Related SPI Register	Comment	Reset State

	-		_____		

QFN32, 7x7

A

PIN 1 CO —



onsemi, **onsemi**, and other names, marks, and brands are registered and/or common law trademarks of Semiconductor Components Industries, LLC dba "**onsemi**" or its affiliates and/or subsidiaries in the United States and/or other countries. **onsemi** owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of **onsemi**'s product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. **onsemi** reserves the right to make changes at any time to any products or information herein, without notice. The information herein is provided "as-is" and **onsemi** makes no warranty, representation or guarantee regarding the accuracy of the information, product features, availability, functionality, or suitability of its products for any particular purpose, nor does **onsemi** assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using **onsemi**
