Introduction

Block DIAGRAM

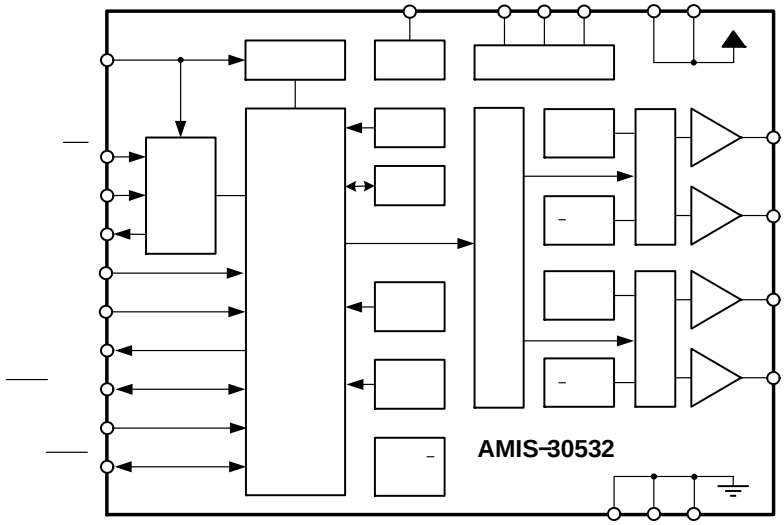
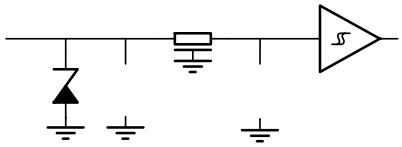


Figure 1. Block Diagram AMIS−30532

Table 1. PIN LIST AND DESCRIPTION

Name	Pin	Description	Type	Equivalent Schematic

EQUIVALENT SCHEMATICS



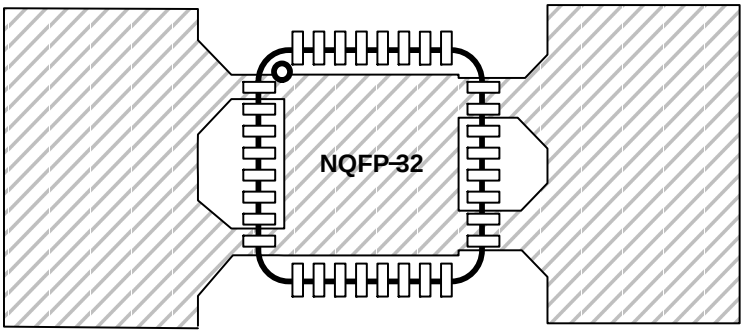


Figure 4. Example of NQFP-32 PCB Ground Plane Layout in Top View (Preferred Layout at Top and Bottom)

ELECTRICAL SPECIFICATION

Recommend Operation Conditions

Table 5. DC PARAMETERS

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

Table 6. AC PARAMETERS

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

TYPICAL APPLICATION SCHEMATIC

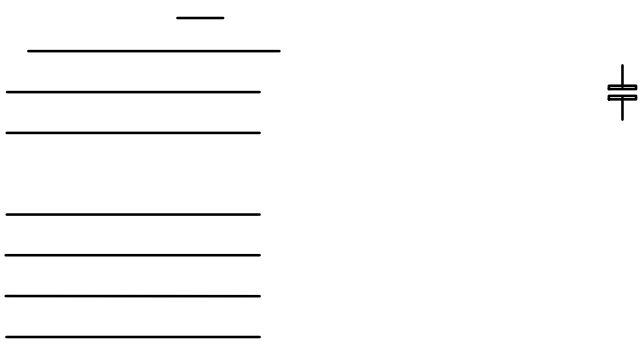


Figure 7. Typical Application Schematic AMIS−30532

FUNCTIONAL DESCRIPTION

H−Bridge Drivers

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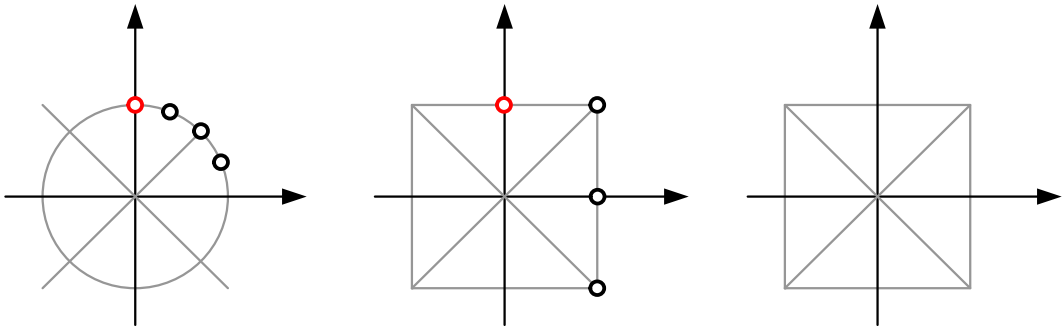
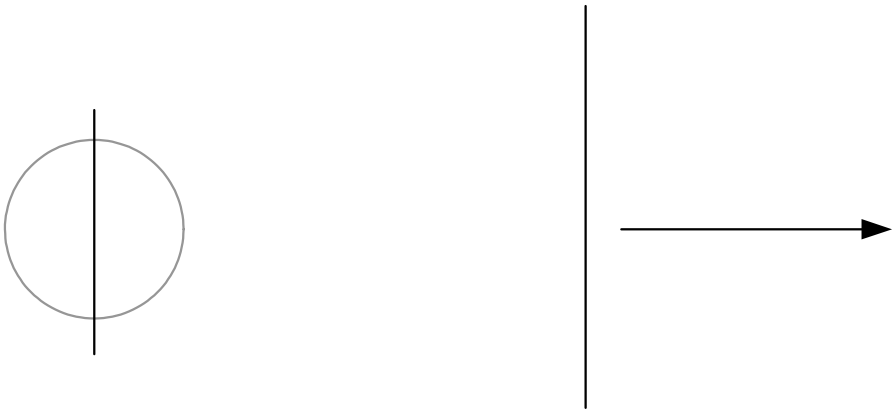
<MOTEN> −

Table 11. CIRCULAR TRANSLATOR TABLE (CONTINUED)

MSP[6:0]





Speed and Load Angle Output

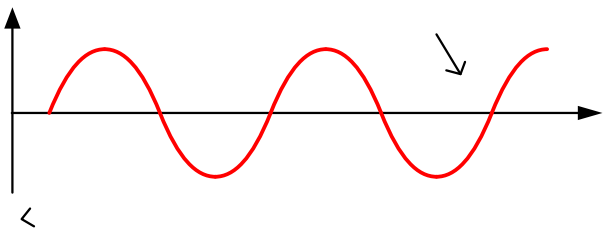
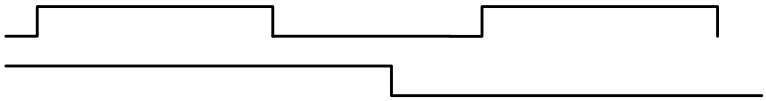


Figure 14. Principle of Bemf Measurement



Error Output

Power−On Reset (POR) Function

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

Logic Supply Regulator

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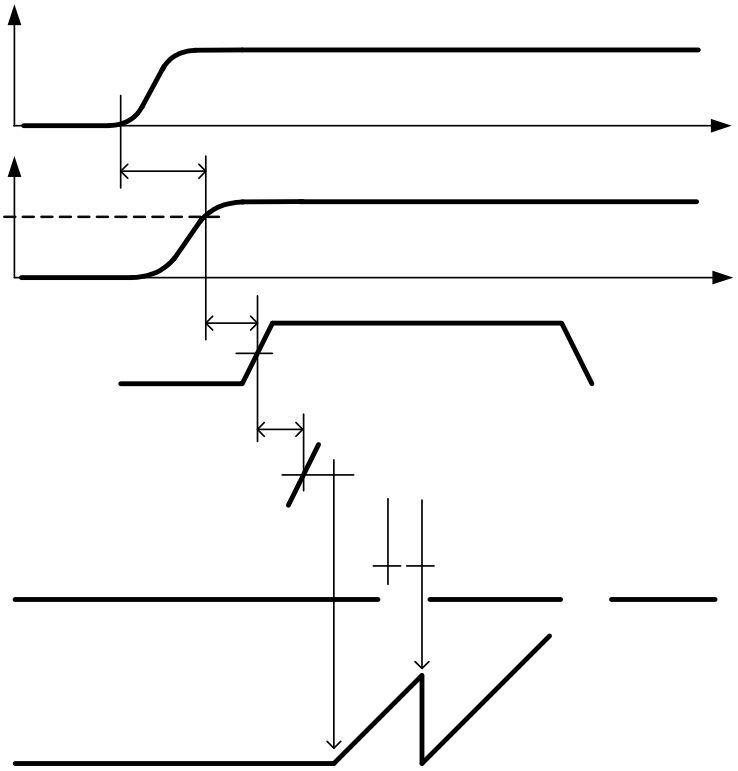
– <SLP> –



SPI INTERFACE

SPI Transfer Format and Pin Signals

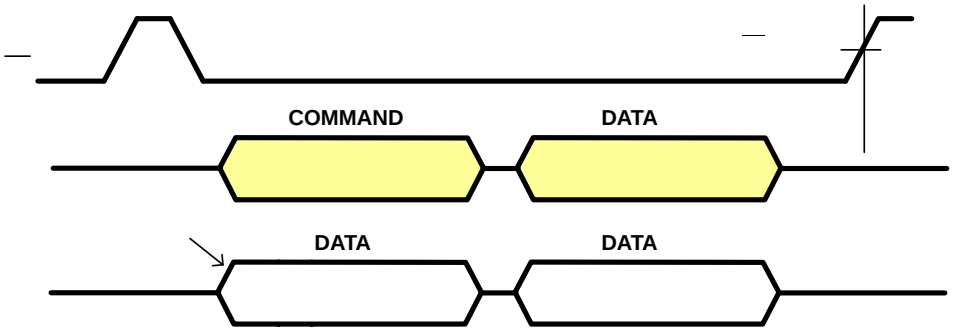


Figure 21. Single WRITE Operation where DATA from the Master is written in SPI register with Address 3

Examples of Combined READ and WRITE Operations

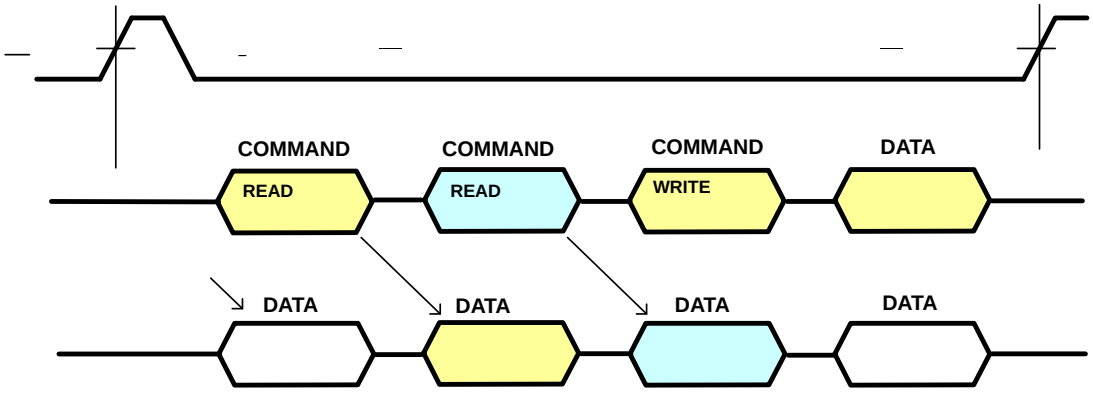


Figure 22. 2 Successive READ Commands Followed by a WRITE Command

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
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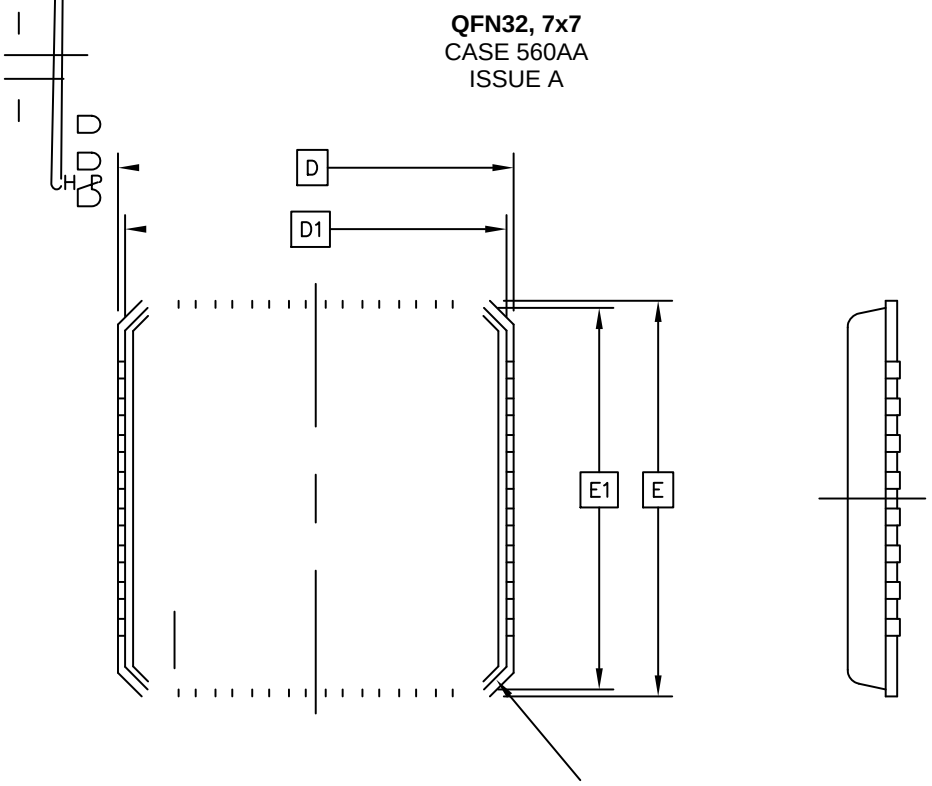
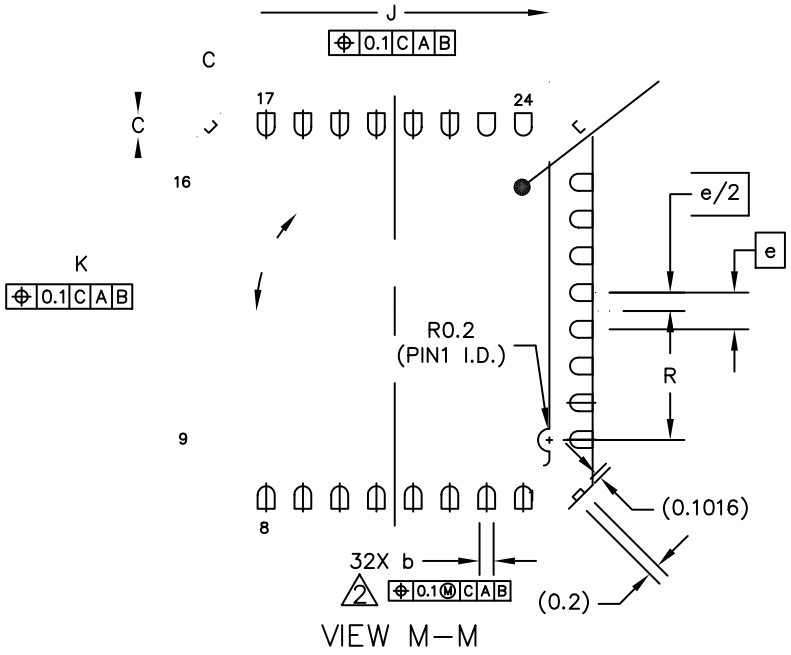
QFN32, 7x7
CASE 560AA
ISSUE A

DATE 23 SEP 2015





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DESCRIPTION:		