

# KSZ8041NL-EVAL Eval Board Revision 1.6

## REVISION HISTORY

DATE	DESCRIPTION	REVISION
7/27/12	Initial release	1.0
8/15/18	Update J1 RJ45 connector part number and pinout connection	1.1

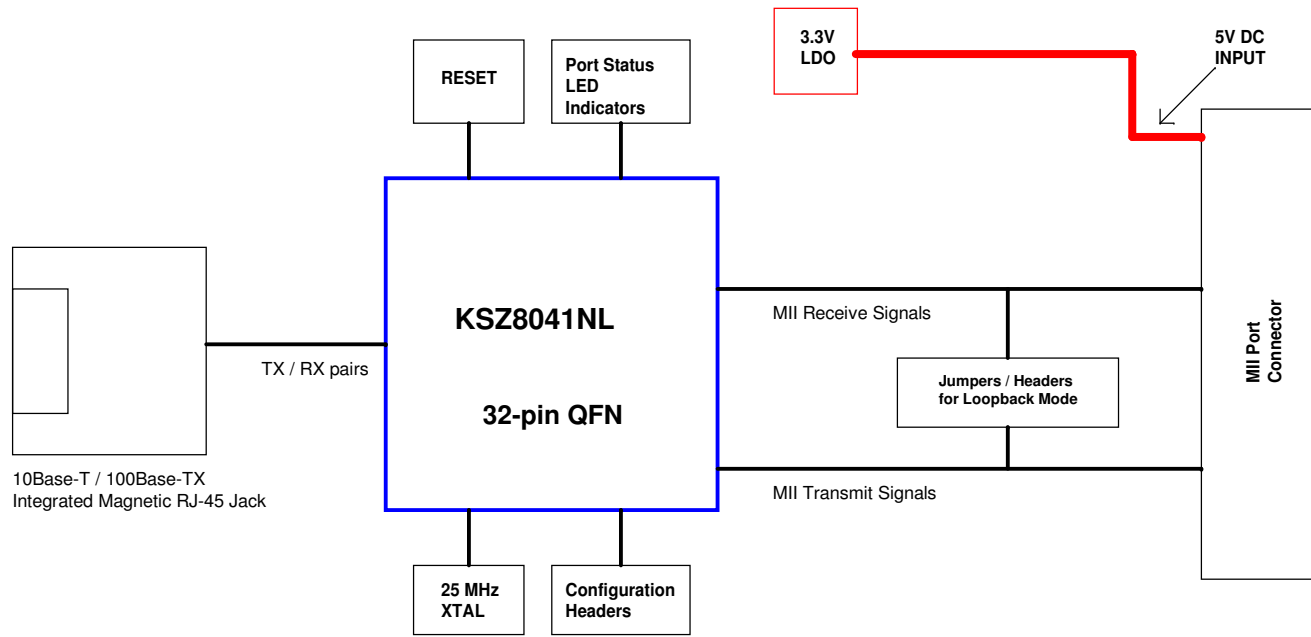
## Table of Contents

PAGE 01: Revision History  
PAGE 02: KSZ8041NL-EVAL EVB -- Block Diagram  
PAGE 03: KSZ8041NL Device

CONFIDENTIAL & PROPRIETARY

Title			
KSZ8041NL Eval Board Revision 1.6			
Size	Document Number		Rev
	Revision History		1.1
Date:	Wednesday, August 15, 2018		Sheet 1 of 3

KSZ8041NL-EVAL EVB - BLOCK DIAGRAM

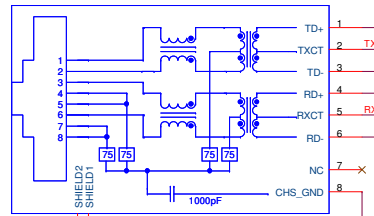


CONFIDENTIAL & PROPRIETARY

Title		
KSZ8041NL-EVAL Eval Board Revision 1.6		
Size	Document Number	Rev
	KSZ8041NL EVB -- Block Diagram	1.1
Date:	Wednesday, August 15, 2018	Sheet 2 of 3

- Notes:**
1. KSZ8041NL has a Paddle Ground on bottom side of chip. Refer to datasheet for mechanical dimensions.
  2. KSZ8041NL provides the 1.8V supply for the core (pin 2). Decouple pin 2 as shown.
  3. Place components (Y1, C16, C17, C53, R14, R15) and (R10, R11, R12, R13, C13, C15) close to respective pins of U1.

**J1 RJ-45 Magnetic Jack**  
**Pulse J0012D21NL**



Place SIGNAL\_GND return of FB7 close to SIGNAL\_GND at 5V input power to board.

Route both traces of each differential pair as identical to each other as possible at 6 mil width / 6 mil parallel spacing, and at least 18 mils away from all other signals.

CHASSIS\_GND\_NL

FB7 FB7

SIGNAL\_GND\_NL

TXD+ TXD- RXD+ RXD- TX+ TX- RX+ RX-

TXCT TXCT RXCT RXCT

C58 0.1uF C57 0.1uF R101 0

C13 0.1uF R10 49.9 R11 49.9 R12 49.9 R13 49.9

C15 0.1uF

C16 22pF C17 22pF

Y1 25MHz

C53 6.49K R15 NC

C3 22uF

C8 10uF

C9 2.2uF C11 0.1uF

C10 0.1uF

C2 47uF C5 0.1uF

C7 0.1uF

C4 0.1uF

C1 47uF

C6 10uF

C3A 3.3A

C5A 3.3A

C6A 3.3A

C7A 3.3A

C8A 3.3A

C9A 3.3A

C10A 3.3A

C11A 3.3A

C12A 3.3A

C13A 3.3A

C14A 3.3A

C15A 3.3A

C16A 3.3A

C17A 3.3A

C18A 3.3A

C19A 3.3A

C20A 3.3A

C21A 3.3A

C22A 3.3A

C23A 3.3A

C24A 3.3A

C25A 3.3A

C26A 3.3A

C27A 3.3A

C28A 3.3A

C29A 3.3A

C30A 3.3A

C31A 3.3A

C32A 3.3A

C33A 3.3A

C34A 3.3A

C35A 3.3A

C36A 3.3A

C37A 3.3A

C38A 3.3A

C39A 3.3A

C40A 3.3A

C41A 3.3A

C42A 3.3A

C43A 3.3A

C44A 3.3A

C45A 3.3A

C46A 3.3A

C47A 3.3A

C48A 3.3A

C49A 3.3A

C50A 3.3A

C51A 3.3A

C52A 3.3A

C53A 3.3A

C54A 3.3A

C55A 3.3A

C56A 3.3A

C57A 3.3A

C58A 3.3A

C59A 3.3A

C60A 3.3A

C61A 3.3A

C62A 3.3A

C63A 3.3A

C64A 3.3A

C65A 3.3A

C66A 3.3A

C67A 3.3A

C68A 3.3A

C69A 3.3A

C70A 3.3A

C71A 3.3A

C72A 3.3A

C73A 3.3A

C74A 3.3A

C75A 3.3A

C76A 3.3A

C77A 3.3A

C78A 3.3A

C79A 3.3A

C80A 3.3A

C81A 3.3A

C82A 3.3A

C83A 3.3A

C84A 3.3A

C85A 3.3A

C86A 3.3A

C87A 3.3A

C88A 3.3A

C89A 3.3A

C90A 3.3A

C91A 3.3A

C92A 3.3A

C93A 3.3A

C94A 3.3A

C95A 3.3A

C96A 3.3A

C97A 3.3A

C98A 3.3A

C99A 3.3A

C100A 3.3A

C101A 3.3A

C102A 3.3A

C103A 3.3A

C104A 3.3A

C105A 3.3A

C106A 3.3A

C107A 3.3A

C108A 3.3A

C109A 3.3A

C110A 3.3A

C111A 3.3A

C112A 3.3A

C113A 3.3A

C114A 3.3A

C115A 3.3A

C116A 3.3A

C117A 3.3A

C118A 3.3A

C119A 3.3A

C120A 3.3A

C121A 3.3A

C122A 3.3A

C123A 3.3A

C124A 3.3A

C125A 3.3A

C126A 3.3A

C127A 3.3A

C128A 3.3A

C129A 3.3A

C130A 3.3A

C131A 3.3A

C132A 3.3A

C133A 3.3A

C134A 3.3A

C135A 3.3A

C136A 3.3A

C137A 3.3A

C138A 3.3A

C139A 3.3A

C140A 3.3A

C141A 3.3A

C142A 3.3A

C143A 3.3A

C144A 3.3A

C145A 3.3A

C146A 3.3A

C147A 3.3A

C148A 3.3A

C149A 3.3A

C150A 3.3A

C151A 3.3A

C152A 3.3A

C153A 3.3A

C154A 3.3A

C155A 3.3A

C156A 3.3A

C157A 3.3A

C158A 3.3A

C159A 3.3A

C160A 3.3A

C161A 3.3A

C162A 3.3A

C163A 3.3A

C164A 3.3A

C165A 3.3A

C166A 3.3A

C167A 3.3A

C168A 3.3A

C169A 3.3A

C170A 3.3A

C171A 3.3A

C172A 3.3A

C173A 3.3A

C174A 3.3A

C175A 3.3A

C176A 3.3A

C177A 3.3A

C178A 3.3A

C179A 3.3A

C180A 3.3A

C181A 3.3A

C182A 3.3A

C183A 3.3A

C184A 3.3A

C185A 3.3A

C186A 3.3A

C187A 3.3A

C188A 3.3A

C189A 3.3A

C190A 3.3A

C191A 3.3A

C192A 3.3A

C193A 3.3A

C194A 3.3A

C195A 3.3A

C196A 3.3A

C197A 3.3A

C198A 3.3A

C199A 3.3A

C200A 3.3A

C201A 3.3A

C202A 3.3A

C203A 3.3A

C204A 3.3A

C205A 3.3A

C206A 3.3A

C207A 3.3A

C208A 3.3A

C209A 3.3A

C210A 3.3A

C211A 3.3A

C212A 3.3A

C213A 3.3A

C214A 3.3A

C215A 3.3A

C216A 3.3A

C217A 3.3A

C218A 3.3A

C219A 3.3A

C220A 3.3A

C221A 3.3A

C222A 3.3A

C223A 3.3A

C224A 3.3A

C225A 3.3A

C226A 3.3A

C227A 3.3A

C228A 3.3A

C229A 3.3A

C230A 3.3A

C231A 3.3A

C232A 3.3A

C233A 3.3A

C234A 3.3A

C235A 3.3A

C236A 3.3A

C237A 3.3A

C238A 3.3A

C239A 3.3A

C240A 3.3A

C241A 3.3A

C242A 3.3A

C243A 3.3A

C244A 3.3A

C245A 3.3A

C246A 3.3A

C247A 3.3A

C248A 3.3A

C249A 3.3A

C250A 3.3A

C251A 3.3A

C252A 3.3A

C253A 3.3A

C254A 3.3A

C255A 3.3A

C256A 3.3A

C257A 3.3A

C258A 3.3A

C259A 3.3A

C260A 3.3A

C261A 3.3A

C262A 3.3A