

Introduction

The KSZ8863RLL and KSZ8873RLL are a highly integrated Layer 2 managed 3-port switch, Port 3 of KSZ8863RLL and KSZ8873RLL support MAC3 RMII interface. In this app note, we describe RMII interface connections in the different modes and applications for the KSZ8863RLL and KSZ8873RLL.

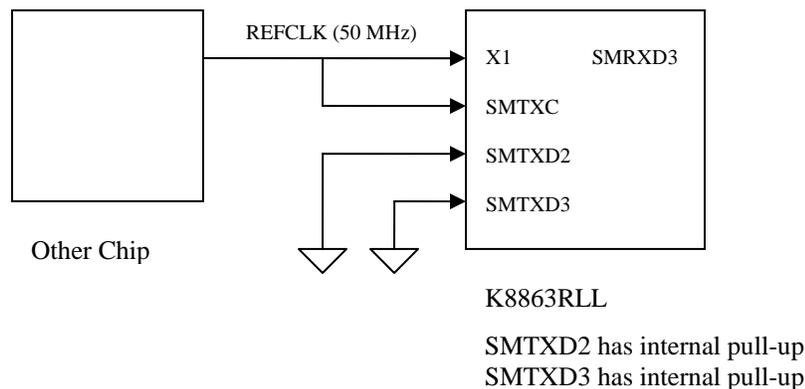
RMII clock connection

For pins (SPIQ, SMTXD2, and SMTXD3) with internal pull-up, the external pull-up resistor can be removed if the pin request to have logic one.

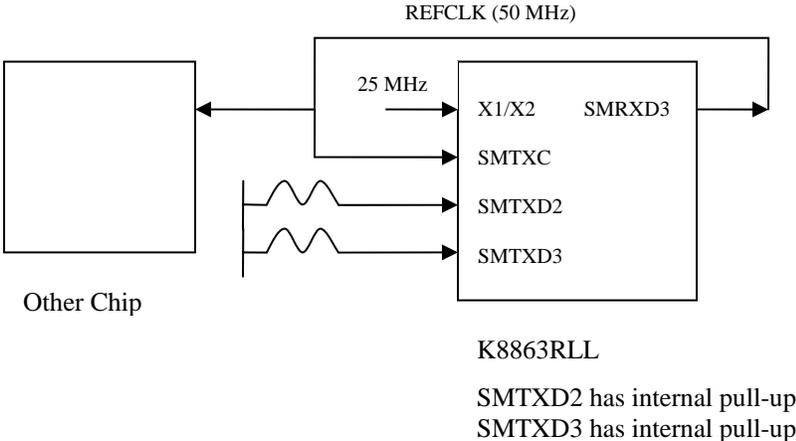
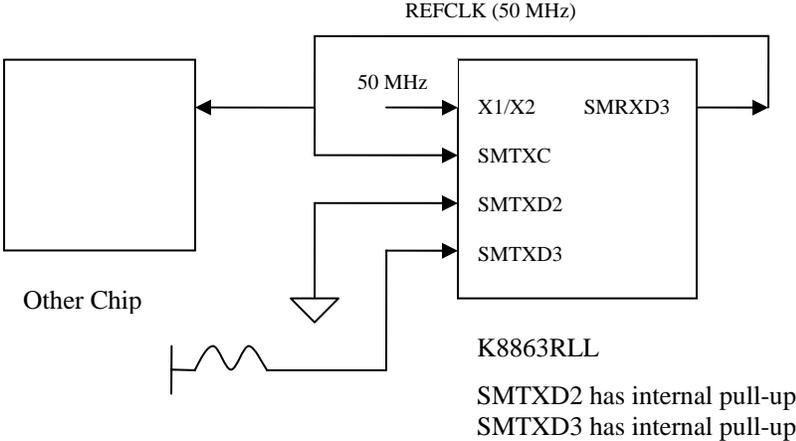
Pull-up and pull-down

In the figures below, all pull-up request 4.7Kohm pull-up resistors, all pull-down request 1Kohm pull-down resistors.

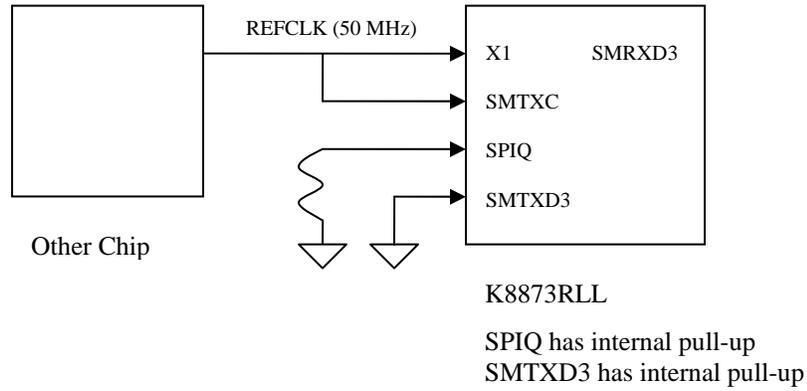
50 MHz Refclk Input to K8863RLL



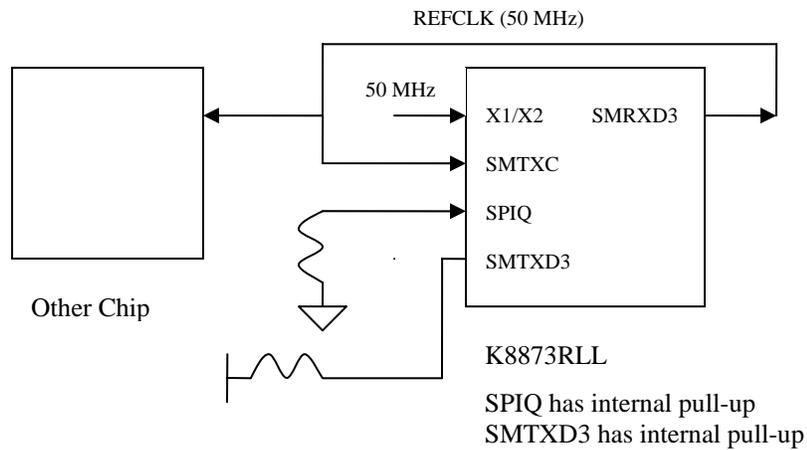
50 MHz Output from K8863RLL

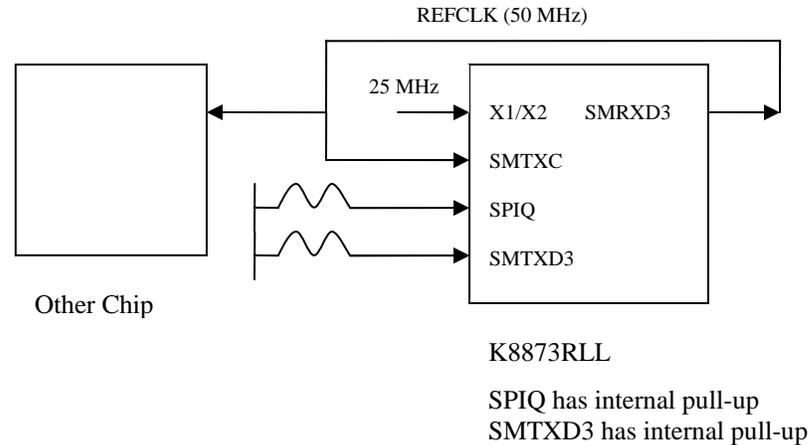


50 MHz Refclk Input to K8873RLL



50 MHz Output from K8873RLL





Conclusion

By the above describes for the KSZ8863RLL and KSZ8873RLL, we have known KSZ8863RLL and KSZ8873RLL support both providing 50MHz RMII reference clock and receiving 50MHz RMII reference clock, They can be used flexible in RMII connection for data transfer between microprocessors to Ethernet switch MAC layer. The reduced pin count MII interface can be used widely in current new products and your Ethernet applications. For the detail device information, please see their datasheets in www.micrel.com

MICREL, INC. 1849 FORTUNE DRIVE SAN JOSE, CA 95131 USA

TEL +1 (408) 944-0800 FAX +1 (408) 474-1000 WEB <http://www.micrel.com>

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