

Product Change Notification / SYST-25JYYN199

Date:

27-May-2021

Product Category:

Ethernet PHYs

PCN Type:

Document Change

Notification Subject:

Data Sheet - KSZ9131MNX - Gigabit Ethernet Transceiver with GMII/MII Support Data Sheet Document Revision

Affected CPNs:

SYST-25JYYN199_Affected_CPN_05272021.pdf SYST-25JYYN199_Affected_CPN_05272021.csv

Notification Text:

SYST-25JYYN199

Microchip has released a new Product Documents for the KSZ9131MNX - Gigabit Ethernet Transceiver with GMII/MII Support of devices. If you are using one of these devices please read the document located at KSZ9131MNX - Gigabit Ethernet Transceiver with GMII/MII Support.

Notification Status: Final

Description of Change:

1) able 3-8, "Device Mode Selections". 1000BT Full Duplex need to change to 'no' for modes 1001 (9) and 1011 (11). Replace one column "PME Pin Enable" with two columns: "Pin 19 Function" (PME_N1) and "Pin 53 Function" (PME_N2).

2) Section 4.13.3.1.1 "LED Combine". Note added at end of the paragraph: LED Behavior Register, Bit 15 = 1 (Default is 0) to set the LED Link/Activity to the desired value. This can be done in the same LED Behavior Register write to set the LED Combine Disables field.

3) Section 4.15 "LinkMD® Cable Diagnostic" 6th paragraph: Removed "With the Bit[9:0] Definition (VCT_SEL[1:0]) field set to 0,"

4) Section 5.1 "Register Map". "These registers are accessed through the SMI (MDIO/MDC) interface." added before the registers.

5) Section 5.2.16 "LinkMD Cable Diagnostic Register". Register bits [11:10]: Reserved. Register bits [9:8]: Sentences removed with "VCT_SEL". Register bits [7:0]: Sentence removed about "VCT_SEL!=00". "When VCT_SEL = 0," removed in

the next sentence.

6) Section 5.3 "MDIO Manageable Device (MMD) Registers" "These registers are accessed through the SMI (MDIO/MDC) interface." added before the registers.

7) Table 6-3, "Power Consumption" Right column, 85°C max power: 793.7 changed to 681.9 mW. Right column, 105°C max power: 804.2 changed to 692.5 mW.

8) Section 6.4 "Power Consumption" Added new tables after Table 6-3, "Power Consumption": Table 6-4, Table 6-5, Table 6-6, Table 6-7

9) Table 6-11, "100BASE-TX Transceiver Characteristics" Last row: Typical Reference voltage of ISET changed from "0.61 V" to "1.20 V".

10) Figure 6-2, "Power Sequence Tim[1]ing Internal Regulators" VDDIO to DVDDH changed in the graphic. 11) Section 6.7 "Clock Circuit" Second sentence changed to "If the single ended clock oscillator method is implemented, XO should be left unconnected and XI should be driven with either a nominal 0-2.5V or a nominal 0-3.3V clock signal, dependent on the supply level of AVDDH (2.5V and 3.3V, respectively)."

Impacts to Data Sheet: None

Reason for Change: To Improve Manufacturability

Change Implementation Status: Complete

Date Document Changes Effective: 27 May 2021

NOTE: Please be advised that this is a change to the document only the product has not been changed.

Markings to Distinguish Revised from Unrevised Devices: N/A

Attachments:

KSZ9131MNX - Gigabit Ethernet Transceiver with GMII/MII Support

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Affected Catalog Part Numbers (CPN)

KSZ9131MNXC KSZ9131MNXC-TR KSZ9131MNXI KSZ9131MNXI-TR