



Date: Jan 30, 2015
PPCN # 150001

PROCESS/ PRODUCT CHANGE NOTIFICATION

If you have any questions concerning this change, please contact:

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TYPE OF CHANGE

- Bonding wire change from Gold to Silver for all parts of the KSZ8081/KSZ8091 family (all MII/RMII parts) manufactured at OSE, Taiwan.
- Silicon revision from Rev A2 to Rev A3 for RMII parts only of the KSZ8081/KSZ8091 family
- Bonding wire change from Gold to Silver for KSZ8041NL/KSZ8041NLI/KSZ8041RNL/KSZ8041RNLI/SPNZ801059 parts manufactured at TICP, Taiwan
- Impacted part numbers are listed under 'Product ID' section below
- **Ordering part numbers & Device markings:**
 - Silver wire bonded products:
 - For the first 6-months,
 - Order with special part numbers (SPNZxxxxxx/SPNYxxxxxx)
 - Device marking: KSZ8081xxxx/KSZ8091xxxx/KSZ8041xxxx
YYWWSxxx
 - After 6-months,
 - Order with generic part numbers (KSZ8081xxxx/KSZ8091xxxx/KSZ8041xxxx)
 - Device marking: KSZ8081xxxx/KSZ8091xxxx/KSZ8041xxxx
YYWWSxxx
 - Gold wire bonded products:
 - For the first 6-months,
 - Order with generic part numbers (KSZ8081xxxx/KSZ8091xxxx/KSZ8041xxxx)
 - Device marking: KSZ8081xxxx/KSZ8091xxxx/KSZ8041xxxx
YYWWxxx
 - After 6-months,
 - Order with special part numbers (SPNZxxxxxx/SPNYxxxxxx)
 - Device marking: KSZ8081xxxx/KSZ8091xxxx/KSZ8041xxxx
YYWWxxx

EFFECTIVITY

- KSZ8081xxxx/KSZ8091xxxx Product Family:
 - a. Rev A3 (RMII parts) based Silver wire bonded products will start shipping from February 9' 2015.
 - b. Rev A2 (MII parts) based Silver wire bonded products will start shipping from February 9' 2015.
 - c. Rev A2 (MII/RMII parts) based Gold wire bonded products will continue to ship to customers until August 31' 2015
- KSZ8041xxxx Product Family:
 - a. Rev A4 based Silver wire bonded products will start shipping from March 9' 2015



KSZ8081xxxxx/KSZ8091xxxxx Product Family:

1. Before August 31' 2015, Rev A3 (RMII) & Rev A2 (MII) parts based on Silver wire bonding are available under these special part numbers:

- *SPNZ801132* for KSZ8081RNDCA
- *SPNY801132* for KSZ8081RNDIA (I-Temp version)
- *SPNZ801133* for KSZ8081RNACA
- *SPNY801133* for KSZ8081RNAIA (I-Temp version)
- *SPNZ801134* for KSZ8081RNBCA
- *SPNY801134* for KSZ8081RNBIA (I-Temp version)
- *SPNZ801135* for KSZ8081MNXCA
- *SPNY801135* for KSZ8081MNXIA (I-Temp version)

- *SPNZ801137* for KSZ8091RNDCA
- *SPNY801137* for KSZ8091RNDIA (I-Temp version)
- *SPNZ801138* for KSZ8091RNACA
- *SPNY801138* for KSZ8091RNAIA (I-Temp version)
- *SPNZ801139* for KSZ8091RNBCA
- *SPNY801139* for KSZ8091RNBIA (I-Temp version)
- *SPNZ801140* for KSZ8091MNXCA
- *SPNY801140* for KSZ8091MNXIA (I-Temp version)

2. Before August 31' 2015, Rev A2 parts (RMII/MII) based on Gold wire bonding are available under these generic part numbers:

- KSZ8081RNDCA
- KSZ8081RNDIA
- KSZ8081RNACA
- KSZ8081RNAIA
- KSZ8081RNBCA
- KSZ8081RNBIA
- KSZ8081MNXCA
- KSZ8081MNXIA

- KSZ8091RNDCA
- KSZ8091RNDIA
- KSZ8091RNACA
- KSZ8091RNAIA
- KSZ8091RNBCA
- KSZ8091RNBIA
- KSZ8091MNXCA
- KSZ8091MNXIA

3. After September 1st, 2015, Rev A3 (RMII) & Rev A2 (MII) based on Silver wire bonding are available under these generic part numbers:

- KSZ8081RNDCA (Rev A3)
- KSZ8081RNDIA (Rev A3)
- KSZ8081RNACA (Rev A3)



- KSZ8081RNAIA (Rev A3)
- KSZ8081RNBCA (Rev A3)
- KSZ8081RNBIA (Rev A3)
- KSZ8081MNXCA (Rev A2)
- KSZ8081MNXIA (Rev A2)

- KSZ8091RNDCA (Rev A3)
- KSZ8091RNDIA (Rev A3)
- KSZ8091RNACA (Rev A3)
- KSZ8091RNAIA (Rev A3)
- KSZ8091RNBCA (Rev A3)
- KSZ8091RNBIA (Rev A3)
- KSZ8091MNXCA (Rev A2)
- KSZ8091MNXIA (Rev A2)

4. After September 1st, 2015, Rev A2 parts (RMII/MII) based on Gold wire bonding are available under these special part numbers::

- *SPNZ801142* for KSZ8081RNDCA
- *SPNY801142* for KSZ8081RNDIA (I-Temp version)
- *SPNZ801143* for KSZ8081RNACA
- *SPNY801143* for KSZ8081RNAIA (I-Temp version)
- *SPNZ801144* for KSZ8081RNBCA
- *SPNY801144* for KSZ8081RNBIA (I-Temp version)
- *SPNZ801145* for KSZ8081MNXCA
- *SPNY801145* for KSZ8081MNXIA (I-Temp version)

- *SPNZ801147* for KSZ8091RNDCA
- *SPNY801147* for KSZ8091RNDIA (I-Temp version)
- *SPNZ801148* for KSZ8091RNACA
- *SPNY801148* for KSZ8091RNAIA (I-Temp version)
- *SPNZ801149* for KSZ8091RNBCA
- *SPNY801149* for KSZ8091RNBIA (I-Temp version)
- *SPNZ801150* for KSZ8091MNXCA
- *SPNY801150* for KSZ8091MNXIA (I-Temp version)

KSZ8041xxxx Product Family:

5. Before October 30' 2015, Rev A4 parts based on Silver wire bonding are available under these special part numbers:

- *SPNZ801162* for KSZ8041NL
- *SPNY801162* for KSZ8041NLI (I-Temp version)
- *SPNZ801163* for SPNZ801059
- *SPNZ801164* for KSZ8041RNL
- *SPNY801164* for KSZ8041RNLI (I-Temp version)



6. Before October 30' 2015, Rev A4 parts based on Gold wire bonding are available under these part numbers:
 - KSZ8041NL
 - KSZ8041NLI
 - SPNZ801059
 - KSZ8041RNL
 - KSZ8041RNLI

7. After November 2nd, 2015, Rev A4 parts based on Silver wire bonding are available under these part numbers:
 - KSZ8041NL
 - KSZ8041NLI
 - SPNZ801059
 - KSZ8041RNL
 - KSZ8041RNLI

8. After November 2nd, 2015, Rev A4 parts based on Gold wire bonding are available under these part numbers:
 - *SPNZ801165* for KSZ8041NL
 - *SPNY801165* for KSZ8041NLI (I-Temp version)
 - *SPNZ801166* for SPNZ801059
 - *SPNZ801167* for KSZ8041RNL
 - *SPNY801167* for KSZ8041RNLI (I-Temp version)

PRODUCT ID (DESCRIPTION)

- KSZ8081RNDCA
- KSZ8081RNDIA
- KSZ8081RNACA
- KSZ8081RNAIA
- KSZ8081RNBCA
- KSZ8081RNBIA
- KSZ8081MNXCA
- KSZ8081MNXIA

- KSZ8091RNDCA
- KSZ8091RNDIA
- KSZ8091RNACA
- KSZ8091RNAIA
- KSZ8091RNBCA
- KSZ8091RNBIA
- KSZ8091MNXCA
- KSZ8091MNXIA

- KSZ8041NL
- KSZ8041NLI
- SPNZ801059
- KSZ8041RNL
- KSZ8041RNLI



DESCRIPTION OF CHANGE/EFFECT OF CHANGE

1. Gold to Silver bonding wire transition for specified parts of the KSZ8081/KSZ8091 & KSZ8041 family:

There is no device performance change due to the bonding wire transition from Gold to Silver. Gold-wire and silver-wire parts are drop-in pin compatible.

2. Silicon revision from Rev A2 to Rev A3 for RMII parts only of the KSZ8081/KSZ8091 family

No.	Description of the Change	Customer Impact & Recommended Action
1	The silicon revision number in PHY Register 3h, Bits [3:0] is changed from 0x0 for rev-A2 to 0x1 for rev-A3.	If software checks the silicon revision number, software changes may be needed.
2	For RMII-25Mhz Clock Mode, the 50Mhz REF_CLK output has been improved.	None. 50Mhz REF_CLK output has been improved in A3.

Qualification

See attached reliability reports.