PROCESS/ PRODUCT CHANGE NOTIFICATION

If you have any questions concerning this change, please contact:
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TYPE OF CHANGE
- Silicon revision change from Rev A2 to Rev A3 for KSZ8895/KSZ8864 product family, based on Gold wire bonding
  - KSZ8895/KSZ8864 generic part #s will be used for Rev A3 Gold wire bonded products
  - SPN#s will be used for Rev A2 Gold wire bonded products
- Bonding wire change from Gold to Silver for all parts of the KSZ8895/KSZ8864 family
- Impacted part numbers are listed under 'Product ID' section below

PRODUCT ID (DESCRIPTION)
- KSZ8864CNXCA
- KSZ8864CNXIA
- KSZ8895FQXCA
- KSZ8895FQXIA
- KSZ8895MQXCA
- KSZ8895MQXIA
- KSZ8895RQXCA
- KSZ8895RQXIA
- KSZ8895ML

The AEC-Q100 certified products for Automotive are not impacted by this PPCN

- **Ordering part numbers & Device markings:**
  - Rev A3 Gold wire bonded products:
    - For the first 6-months,
      - Order with generic part numbers
      - Device marking: KSZ8895xxxxx/KSZ8864xxxxx
        YYWWA3x
    - After 6-months,
      - Order with special part numbers
      - Device marking: No change

  - Rev A2 Gold wire bonded products:
    - Time limit to be decided at a later time
      - Order with special part numbers
      - Device marking: KSZ8895xxxxx/KSZ8864xxxxx
        YYWWA2x
  - Rev A3 Silver wire bonded products:
    - For the first 6-months,
      - Order with special part numbers
      - Device marking: KSZ8895xxxxx/KSZ8864xxxxx
        YYWW**S**A3x
    - After 6-months,
      - Order with generic part numbers
      - Device marking: No change

EFFECTIVITY
- KSZ8895xxxxx/KSZ8864xxxxx Product Family:
  a. Rev A3 based Gold wire products started shipping from March 9th, 2015

NOTE: PER JESD46, LACK OF ACKNOWLEDGEMENT OF THE PPCN WITHIN 30 DAYS OF THE
NOTIFICATION DATE CONSTITUTES CUSTOMER'S ACCEPTANCE OF THE CHANGE.

b. Rev A2 based Gold wire products with SPN# will start shipping from April 13th, 2015
c. Rev A3 based Silver wire products will start shipping from March 30th, 2015

1. Starting April 13th, 2015, Rev A2 parts based on Gold wire bonding are available under these special part numbers:
   a. *SPNZ801169* for KSZ8864CNXCA
   b. *SPNY801169* for KSZ8864CNXIA (I-Temp version)
   c. *SPNZ801170* for KSZ8895FQXCA
   d. *SPNY801170* for KSZ8895FQXIA (I-Temp version)
   e. *SPNZ801171* for KSZ8895MQXCA
   f. *SPNY801171* for KSZ8895MQXIA (I-Temp version)
   g. *SPNZ801172* for KSZ8895RQXCA
   h. *SPNY801172* for KSZ8895RQXIA (I-Temp version)

2. Before November 1st, 2015, Rev A3 parts based on Gold wire bonding are available with generic part#s

3. Before November 1st, 2015, Rev A3 parts based on Silver wire bonding are available under these special part numbers:
   - *SPNZ801152* for KSZ8864CNXCA
   - *SPNY801152* for KSZ8864CNXIA (I-Temp version)
   - *SPNZ80115*3 for KSZ8895FQXCA
   - *SPNY801153* for KSZ8895FQXIA (I-Temp version)
   - *SPNZ801154* for KSZ8895MQXCA
   - *SPNY801154* for KSZ8895MQXIA (I-Temp version)
   - *SPNZ801155* for KSZ8895RQXCA
   - *SPNY801155* for KSZ8895RQXIA (I-Temp version)
   - *SPNZ801156* for KSZ8895ML

4. After October 31st, 2015, Rev A3 parts based on Silver wire bonding are available with generic part numbers

5. After October 31st, 2015, Rev A3 parts based on Gold wire bonding are available under these special part numbers::
   - *SPNZ801157 for KSZ8864CNXCA*
   - *SPNY801157 for KSZ8864CNXIA (I-Temp version)*
   - *SPNZ801158 for KSZ8895FQXCA*
   - *SPNY801158 for KSZ8895FQXIA (I-Temp version)*
   - *SPNZ801159 for KSZ8895MQXCA*
   - *SPNY801159 for KSZ8895MQXIA (I-Temp version)*
   - *SPNZ801160 for KSZ8895RQXCA*
   - *SPNY801160 for KSZ8895RQXIA (I-Temp version)*
   - *SPNZ801161 for KSZ8895ML*

DESCRIPTION OF CHANGE/EFFECT OF CHANGE

1. **Gold to Silver bonding wire transition for the KSZ8895/KSZ8864 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. Reliability report on request.

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2. Rev A2 Errata for the KSZ8895/KSZ8864 family

No.	Symptom	Solution/Workaround
1	In I2C mode, EEPROM contents can't be downloaded to registers after reset.	**Workaround for Rev A2/A3:** Works fine by writing Register 1 bits [7:4] chip ID=0x0 in EEPROM.
2	There may be minor packet loss (1-2 packets) over 500K – 1M traffic packets. Packet loss can be observed across any port(s) when using a cable length of approximately 20m +/- 2m. This issue does not exist with other cable lengths.	**Workaround for Rev A2:** After power up reset or warm reset, by configuring hidden register (0xAC) from 0x04 to 0x05 and register (0xAD) from 0x03 to 0x01, the minor packet loss issue is no longer observed. There are no other packet loss issues in regards to meeting IEEE cable length specification. The reserved registers can be accessed through SPI/MDIO interfaces. **Fixed in Rev A3: The default settings of the Rev A3 silicon resolves the minor packet loss issue with the 20M cable completely. There is no need for configuring hidden registers (as highlighted for Rev A2).** **For all new designs, Rev A3 with Silver Wire bonding is recommended for KSZ8895/KSZ8864 product family.**