

Process Change Notice #1208022

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| PCN Date: 8/2/2012 | | | Effective Date: | 8/2/2 | 2012 | | | |
|---|----------------|-----------------------|-----------------------|-------|-------|--------------|--|--|
| Title: C8051T620/621/626/627/320/321/322/323 data sheet update | | | | | | | | |
| Originator: Pedro PachcaPedro Pachuca | | | Phone: 1.512.300.7199 | | | Dept: EMS | | |
| Customer Contact: Kathy Haggar | | Phone: 1.512.532.5869 | | 59 | Dept: | Inside Sales | | |
| PCN Type: | | | | | | | | |
| □ Datasheet | ☐ Fou | | ndry | | | Packing | | |
| ☐ Product Revision | oduct Revision | | mbly 🗌 Labeling | | | g | | |
| ☐ Discontinuance | ☐ Test | t | ☐ Other | | | | | |
| Last Order Date: N/A | | | | | | | | |
| PCN Details | | | | | | | | |
| Description of Change: Data sheet has been updated to include C8051T626-B-GM and C8051T627-B-GM part numbers as well as electrical characteristics unique to these part numbers. The datasheet is available at www.silabs.com | | | | | | | | |
| December Change | _ | | | | | | | |
| Reason for Change: USB family extension | | | | | | | | |
| Impact on Form, Fit, Function, Quality, Reliability: | | | | | | | | |
| There is no impact on form, fit, function, quality and reliability for the existing part numbers. | | | | | | | | |
| Product Identification: C8051T627-B-GM | | | | | | | | |
| Last Date of Unchanged Product: 8/2/2012 | | | | | | | | |
| Qualification Samples: | | | | | | | | |
| Available upon request. Please contact your local Silicon Laboratories sales representative to order samples. A list of Silicon Laboratories sales representatives may be found at www.silabs.com | | | | | | | | |
| Customer Early Acceptance Sign Off: | | | | | | | | |
| Customers may approve early PCN acceptance by completing the information below: | | | | | | | | |
| Early Acceptance: | Date: | | | | | | | |
| | Name: | | | | | | | |
| | Company: | | | | | | | |
| Email your early Acceptance approval to: <u>katherine.haggar@silabs.com</u> | | | | | | | | |
| Qualification Data: | | | | | | | | |
| See Qualification Report below. | | | | | | | | |



Qualification Report

C8051T62x-B-GM Qualification Report

W7101F1 Product Qualification Plan and Report Rev. D

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| C8051T62x-B-GM, Rev B, GSMC Fabrication, ASECL Assembly except as noted | | | | | | | |
|---|--------------------------------|----------------|----------|--------|-------|---------|--------|
| Test Name | Test Condition | Qualification | Start | or End | Notes | Summary | Status |
| | ccelerated Environment Stress | • | | | | | |
| HAST | JA110 | | Q29385 | 0/78 | 1 | | |
| | 130°C, 85%RH | 3 lots, N=>25 | Q29331 | 0/80 | 1 | 3 lots | Pass |
| | 96 hours | | Q29336 | 0/80 | 1 | 0/238 | |
| Temp Cycle | JA104 | | Q29387 | 0/77 | 1 | | |
| | Cond C: -65°C to 150°C | 3 lots, N=>25 | Q29391 | 0/77 | 1 | 3 lots | Pass |
| | 500 cycles | | Q29395 | 0/77 | 1 | 0/231 | |
| HTSL | JA103 | | Q29388 | 0/77 | 1 | | |
| | 150°C, 1000hr | 3 lots, N=>25 | Q29392 | 0/77 | 1 | 3 lots | Pass |
| | | | Q29396 | 0/77 | 1 | 0/231 | |
| Test Group B - A | ccelerated Lifetime Simulation | Tests | | | | | |
| HTOL | JA108 | | Q27686 | 0/82 | | | |
| | 125°C, Dynamic | 3 lots, N=>77 | Q27166 | 0/80 | | 3 lots | |
| | | | Q26267 | 0/80 | | | Pass |
| | Vcc=5.25V, 1000 hours | | Q32214 | 0/80 | | 0/322 | |
| LTOL | JA108 | | | | | | |
| | -10°C, Dynamic | 1 lot, N=>32 | Q25468 | 0/40 | | 1 lots | Pass |
| | Vcc=5.0V, 1000 hours | | ` | | | 0/40 | |
| ELFR | JA108 | | Q27897 | 0/520 | | | |
| | 125°C, Dynamic | | Q26510 | 0/502 | | | |
| | -, -, -, | 3 lots, N=>500 | Q27490 | 0/520 | | 4 lots | Pass |
| | Vcc=5.25V, 48 hours | | Q32213 | 0/520 | | 0/2062 | |
| Data Retention Bake | | | <u> </u> | | | | |
| | 150°C, 1000hr | | Q32084 | 0/44 | | 2 lots | Pass |
| | | | Q32085 | 0/44 | | 0/88 | |
| | | | | | | | |
| | lectrical Verification | | | | | | |
| ESD-HBM | JA114 | | | | | | |
| | | 1 lot, N=>3 | Q32183 | | 2KV | | Pass |
| | | | | | | | |
| ESD-MM | JA115 | | | | | | |
| | | 1 lot, N=>3 | Q32032 | | 225V | | Pass |
| | | | | | | | |
| ESD-CDM | JC101 | | | | | | |
| | | 1 lot, N=>3 | Q32030 | | 1.5KV | | Pass |
| | | | | | | | |
| Latch Up | JESD78 | | | | | | |
| | ±200mA | 1 lot, N=>6 | Q32033 | | 85°C | | Pass |
| | Overvoltage = 3.6V | | Q32034 | | 70-C | 1 | 1 |

Notes:

1. Parts were Preconditioned at MSL 1/ 260°C

| This report applies to the following part numbers: | | | | |
|--|-----------------|--|--|--|
| The report approach to the remaining part manners. | | | | |
| C8051T626-B-GM | C8051T627-B-GM | | | |
| | 55577527 5 5111 | | | |