# INTEGRATED SILICON SOLUTION, INC.

## ISSI Newsletter

### Advanced Memory Solutions
### Innovative Analog and Mixed Signal Solutions

January 2016 | Issue 63

## In this issue:

▶ **News**

ISSI Successfully Completed the Acquisition

▶ **Product Spotlight**

AEC-Q100 Qualified LED Drivers

ISSI Begins to Ramp 38nm-based DDR2 DRAMs

TI Power Delivery Controller, TPS65982 Works with our 3V Serial Flash.

ISSI's New 16Mb and 32Mb High-speed Asynchronous SRAM

▶ **Chipset**

Xilinx Zynq-7000 SoC Now Supports ISSI QSPI Flash.

Altera Stratix V Reference Design board by Terasic uses ISSI Memories

---

## News

### ISSI Successfully Completed the Acquisition

*Dear Partners,*

*We successfully closed our privatization effort in December. ISSI is now a private company. There will be no change in our overall strategy. ISSI will continue to provide a Broad Portfolio of products along with the best quality and long term supply. We are fully committed to providing the best support to our customers as well as our partners. We will continue to invest heavily in new product development of DRAMs, Flash and SRAMs. We will continue to invest aggressively to grow our Analog portfolio to service our target markets.*

*Jimmy Lee and I established ISSI in 1988 and we have seen many semiconductor cycles, and we were able to thrive the ups and downs of the semiconductor industry for 28 years with all your great support.*

*We thank you for your continued efforts and look forward to your partnership in order to grow ISSI's Design Wins and Revenue Potential.*

*Thank You.*

*Regards,*
*KY Han*
*CEO, ISSI*



Click to enlarge.

---

## Product Spotlight

### AEC-Q100 Qualified LED Drivers

ISSI has released the first of many AEC-Q100 Qualified LED Drivers. Please read about the IS32LT3180 device and how it controls two brightness levels for stop and tail light applications.
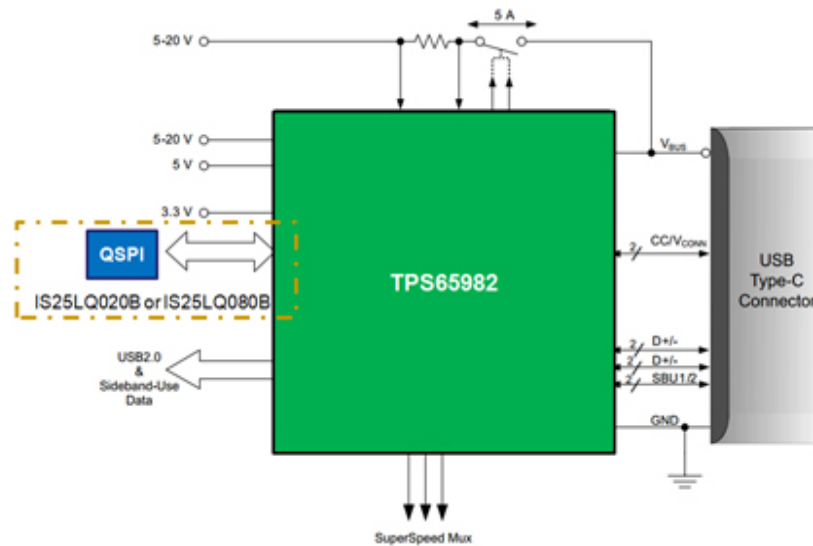
### ISSI begins to Ramp 38nm-based DDR2 DRAMs

These new DDR2 products include 512Mb, (IS43/46DR86400E & IS43/46DR16320E), 1Gb (IS43/46DR81280C & IS43/46DR16640C), 2Gb: (IS43/46DR82560C & IS43/46DR16128C). Please request samples or pricing for your key customers. ISSI is not phasing out DDR2 DRAMs based on earlier generation technology. Please download our DDR2 DRAM flyer.

### TI Power Delivery Controller, TPS65982 Works with our 3V Serial Flash.

ISSI's High Performance Serial Flash is often used in applications to store device settings and configuration data. In the figure below, the ISSI serial flash is being used with the TPS65982. The TPS65982 is a USB type-C and Power Delivery Controller. A 3V Serial Flash such as the IS25LQ020B (2Mb) or the IS25LQ80B (8Mb) is recommend for this application. More information can be found at on our website.

**USB Type-C and USB PD Controller**



Click to enlarge.

## ISSI's New 16Mb and 32Mb High-speed Asynchronous SRAM

ISSI started sampling the new 16Mb high speed SRAM (IS61WV102416DBLL) based on the 40nm technology from Huali. The new die has a competitive cost structure to compete in the market. The new product has an option to support ECC features, and the ordering part number will be different (IS61WV102416EDBLL) .

ISSI also launched the new 32Mb high speed Asynchronous SRAM (IS61WV204816BLL). The first samples available have TSOP package with 2Mx16 configuartion, and 10ns speed grade. The datasheet ( IS61WV204816BLL) available on the website. Please download our flyer here.

## Chipset

## Xilinx Zynq-7000 SoC Now Supports ISSI QSPI Flash

Xilinx's Zynq-7000 SoC now supports ISSI QSPI Flash! In the past, customers have been somewhat limited as to what selection they had for the boot flash. This will add a lot of flexibility. Most industrial, medical, automotive, or consumer application designs using the Xilinx Zynq-7000 SoC would require a QSPI Flash along with it, and now the IS25LP device family is supported and works seamlessly with the Zynq-7000 SoC.

| Flash Device | Mode | Vendor | Flash Density |
|---|---|---|---|
| IS25LP064 | Quad Mode - Single | ISSI | 64 Mb |
| IS25LP064 | Quad Mode - Dual Parallel | ISSI | 64 Mb |
| IS25LP064 | Quad Mode - Dual Parallel | ISSI | 64 Mb |
| IS25LP128 | Quad Mode - Single | ISSI | 128 Mb |
| IS25LP128 | Quad Mode - Dual Parallel | ISSI | 128 Mb |
| IS25LP128 | Quad Mode - Dual Parallel | ISSI | 128 Mb |

Here is a link to the Xilinx website.

ISSI's Chipset Solutions webpage helps guide the choice of ISSI products that are supported by each Xilinx FPGA.

## Altera Stratix V Reference Design board by Terasic uses ISSI Memories

ISSI is pleased to share news of a reference design with a high performance, deterministic low-latency search solution using FPGAs and ISSI memories. Terasic offers the reference design with Altera Stratix V in a full-height, 3/4-length form-factor package, using ISSI DDR3 DRAMs or ISSI QUAD SRAMs. The board demonstrates 100G IP Forwarding and OpenFlow Access Control List (ACL) and can be used by customers to validate the functionality and performance of the design in an actual FPGA.

**The Key applications are:**

- Network processing
- Low-latency trading
- Cloud computing
- High-performance computing
- Data acquisition
- Signal processing

If you are looking for flexible architecture and low-power, low-cost search solutions in high-intensity applications such as network processing, low-latency trading, cloud computing, high-performance computing, data acquisition, and signal processing, please contact us at hsm@issi.com for more information.

The latest ISSI Product Presentations and Product Flyers are always available for download.

### For any questions please use the following contact information

sram@issi.com

dram@issi.com

flash@issi.com

analog@issi.com

KGD@issi.com

### Follow us on