



ISSI Terasic Solution for High-Performance Search

Integrated Silicon Solution, Inc. (ISSI) is a leading Fabless semiconductor company that designs DRAM, Asynchronous SRAM/High Speed Memory (QUAD, Synch SRAM, RLDRAM 2/3), Flash, Analog and Mixed-Signal products. ISSI provides a broad portfolio of high quality products coupled with long term support.

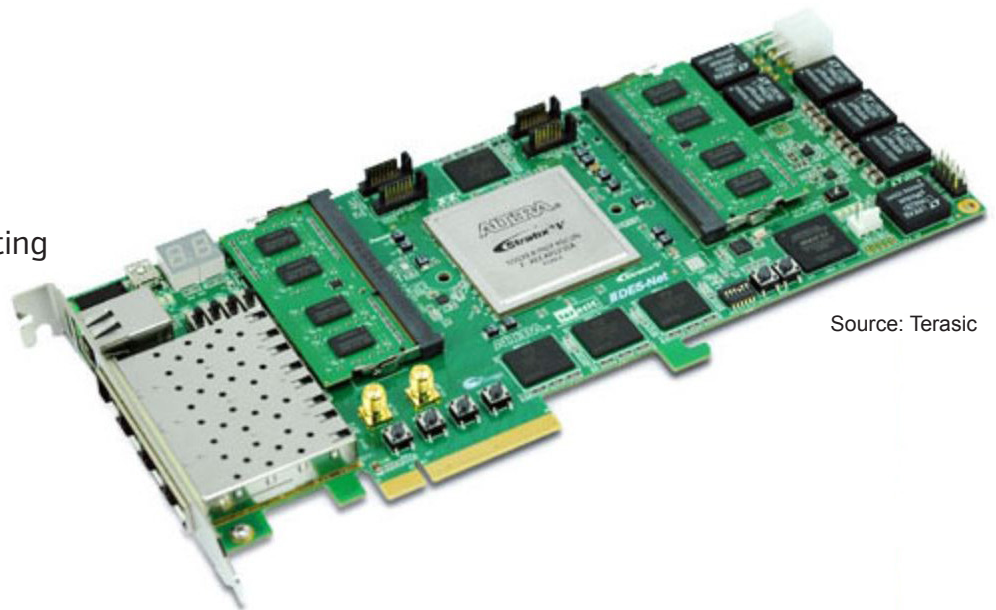
ISSI is pleased to introduce a reference design to showcase high performance, deterministic and ultra-low latency (less than 200ns) search solution using Field Programmable Gate Arrays (FPGAs) and ISSI memories. The reference design is implemented on a Terasic Altera Stratix V Reference Design board, full-height, 3/4-length

form-factor package, using ISSI [DDR3 DRAMs](#) or ISSI [QUAD SRAMs](#). The reference design is to demonstrate 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.

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

► APPLICATIONS:

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



Source: Terasic

Serving Major Market Segments with Quality and Long-Term Support



Automotive



Communications



Medical



Industrial

Long-Term Support

DRAM



RLDRAM^{®2}
RLDRAM^{®3}

SDRAM
SDR, DDR,
DDR2, DDR3, DDR4

Mobile
LP SDRAM,
LPDDR, LPDDR2

MCPs
LPDDR2 +
Serial NOR Flash

Legacy DRAM
3.3V and 5V, EDO/FP

SRAM



Legacy SRAMs
64Kb-8Mb, 5V

**High Speed/Low
Power Async SRAM**
Up to 16Mb

**Pseudo SRAMs/
HyperRAM[™]**
8Mb-128Mb

**High-Performance
Sync / QUAD SRAMs**
2Mb-72Mb

FLASH



Densities
256K - 256Mb

Interface
Serial:
SPI, Dual/Quad SPI,
Multi- I/O SPI,
DTR- SPI,
QPI support
Parallel:
FWH/ISA/X29GL
HyperFlash[™]

Voltage
3V, 2.5V, 1.8V

ANALOG



Audio
Class AB, Class D,
Class G Amplifiers

FxLED
RGB LED Drivers

HBLED
Linear & DC/DC
LED Drivers

Sensor
Touch, Proximity,
Gesture

Serving Major Market Segments with Quality and Long-Term Support



Automotive



Communications



Medical



Industrial