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For Immediate Release

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**DINI Group announces the *DNPCIE_80G_A10_LL*
An Intel/Altera Arria-10 FPGA Board for
High-Speed, Low Latency Network Applications
Algorithmic Acceleration
Data Center Acceleration**

Monster's Sour Caviar

DINI Group announces the immediate availability of the [DNPCIE 80G A10 LL](#) an Intel/Altera Arria-10 FPGA board with a capacity of 10 million ASIC gates. This product is optimized for custom network applications such as inline packet processing using [TOE](#) (TCP/IP Offload) and line speed algorithmic trading. The [DNPCIE_80G_A10_LL](#) joins a long list of FPGA-based network-targeted products from DINI Group, the industry's established leader in large FPGA platforms.

The [DNPCIE_80G_A10](#) is a half-height PCIe board with a single Arria-10 FPGA, three banks of DDR4 memory, and a single bank of QDRII+ memory.

For the FPGA, the [DNPCIE_80G_A10_LL](#) employs the high I/O-count, 1152-pin, flip-chip F34 BGA package. The Arria-10 family of FPGAs contains high-speed transceivers capable of 12.5Gb/s without the need for an external PHY. Eight of these transceivers are used for an **8-lane GEN3 PCIe** interface. Two sets of four of the high-speed transceivers are connected to QSFP+ sockets for two 40GbE Ethernet ports or up to 8 channels of 10 GbE.

One of seven possible Arria-10 FPGAs can be stuffed (largest to smallest): **GX1150, GX900, GX660, GX570, GX480, GX320, GX270**. The SX variation that contains the embedded Dual-core ARM® Cortex®-A9 MPCore™ processor is also an option. Those device options are **SX660, SX570, SX480, SX320, SX270**. Several IEEE 754 floating point functions can be implemented using the DSP blocks in the FPGA fabric.

The [DNPCIE_80G_A10_LL](#) supports three independent DDR4 banks each of 4GB in size. Each bank is PC2400 with a 1024M x 32 configuration. For data lookup that requires absolute minimum latency, the [DNPCIE_80G_A10_LL](#) hosts a QDRII+ memory structured as 4Mx18.

“We made this new Arria-10 board as fast and as versatile as possible.” says Mike Dini, president, “It is perfectly suited for cluster deployment in co-location spaces or exchanges. Network applications and High Frequency/Low Latency Algorithmic Trading can enjoy line speed communications and packet processing with this little jewel.”

DINI Group is an established leader in large, FPGA-based boards, critical IP, and systems. DINI Group FPGA boards are used in large quantities for ASIC and SOC prototyping, low-latency trading, and high-performance computing. From their corporate campus in La Jolla, California, DINI Group employees have supplied over twelve billion ASIC gates.

