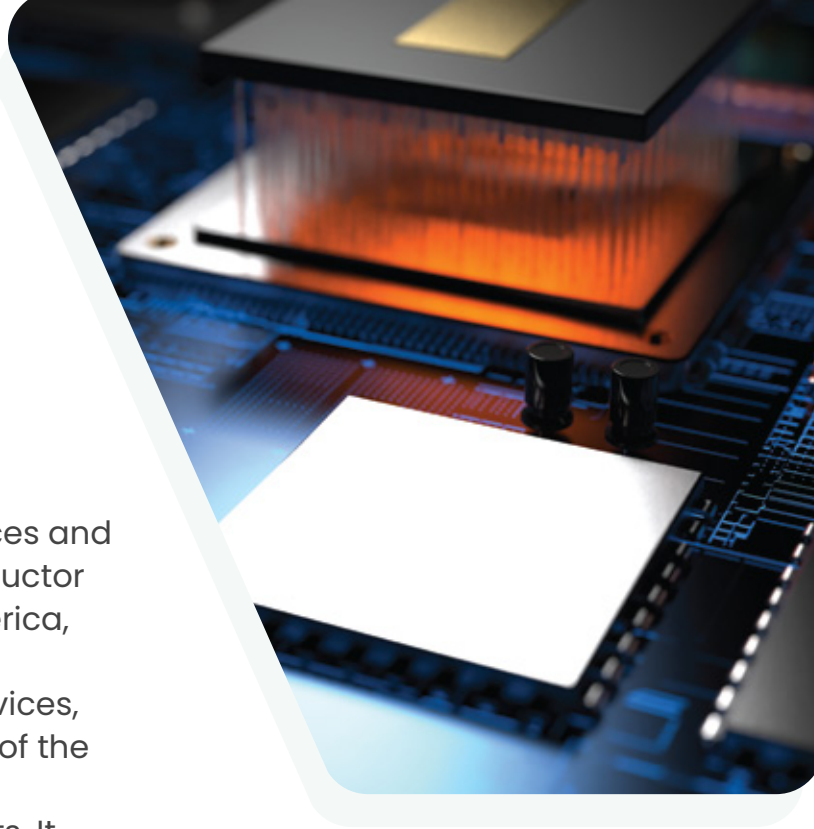# ACL-Mobiveil Solution Offerings

ACL Digital is a global semiconductor services and solutions provider serving Top 20 Semiconductor and Systems Companies across North America, Europe and their counterparts in India. With expertise in VLSI design and verification services, ACL Digital caters to the growing demands of the 5G, data center infrastructure, automotive, consumer electronics and industrial markets. It helps customers transform their product ideas into cost-effective, powerful, performance- and area-optimized system on-chips (SoCs).

Mobiveil is a technology company and works with most of the top semiconductor and system OEMs as well as startups. Mobiveil leverages decades of experience in delivering high-quality, production-proven, high-speed serial interconnect SIP cores, and custom and standard form-factor hardware boards to leading customers worldwide. Mobiveil recently announced availability of CXL 2.0 Design IP (COMPEX) for data center applications and has also developed an FPGA-based NVMe SSD platform comprising of PCI Express Gen5 Controller (GPEX), NVM Express Controller (UNEX), Universal Memory Controller (UMMC), Low Density Parity Check (LDPC) Encoder/Decoder and Flash Memory Controller (ONFI/Toggle) for the PCI Express-based flash storage market.

Offering Description	ACL Digital	Mobiveil
SoC Micro-Architecture / RTL Design	Automotive, 5G & HPC	Storage & Data Centre
Catalog IPs	NO	Wide range of Controller IPs
IP Design & Verification	Analog Mixed -Signal IPs	Digital IPs
Protocol Experience	Generic	DDR, PCIe, NVMe, CXL, ONFI
Analog – Mixed Signal	YES	NO
Physical Design & Verification	Exposure to all TSMC leading edge nodes up to 5 nm. Large Capacity of Physical Design.	YES
Board Design	NO	✓
FPGA Platforms	Design Capacity Only	✓
Embedded / Firmware	Automotive & 5G	Storage & Data Centre
Turnkey ASIC / SoC Development	ACL Digital & Mobiveil combine to bring Turnkey solutions.	

List of Monetizable IPs

Product	Target Market
CXL	Data Center (CPU, Accelerators, AI, GPU)
PCI Express Gen5	Storage/Server/Data Center/AI/Networking
PCI Express Gen4/3/2/1	Storage/Server/Data Center/AI/Networking
PCI Express to AXI Bridge	"
PCI Express Switch	"
PCI Express PCS	"
RapidIO Gen4 (25G)	Wireless Networking, Aerospace, Industrial, Automotive
RapidIO 4/3/2/1	"
NVM Express Controller	Flash Storage
Flash Reliability – LDPC Compiler (Encoder/Decoder)	"
DDR 4/3	All
ONFI/TOGGLE	Flash Storage
RISC V Platform	All
JDEC xSPI Controller	Consumer / Storage
Hyperbus Controller	Automotive / Storage
PS RAM Controller	All
AXI Interconnect Matrix	All