

THE MIST: A LOCAL, SECURE CLOUD CONTEXT



The MIST is a low-level cloud that runs particular compute-intensive, application-specific operations in a power constrained field environment.

LOW POWER / LOW COST CLUSTERS



Sandia Linux Lunchbox



Sandia Linux Wagon

SOLAR-POWERED SUPERCOMPUTING

5 W each (DARPA UHPC targets : 50GFLOPs / W)



Predictable future architectures performance increases

Platform	SheevaPlug	PlugComputer 3.0	Guruplug Display
Cost	\$99	\$129	TBD
CPU	1.2Ghz Feroceon 88FR131	2.0 Ghz Feroceon 88FR131 rev 1	1.2 Ghz PXA-168*
BogoMIPS	1192.75	1998.84	TBD
Flash	512M	512M	2G
RAM	512M	512M (400 Mhz)	512M (800 Mhz)
NIC	GE	GE, BT, WiFi	FE, BT, WiFi

* 50 MFLOPS on cell phone processors