

Fujitsu develops a liquid cooling system for thin mobile devices of smartphone and tablet variety, making it possible for CPUs and other devices to run cooler while avoiding hot-spots inside devices.

The company says the cooling system uses a microscopic copper heat pipe less than 1mm thick, and transfers around five times more heat than current thin heat pipes. The liquid-filled pipes connect two components-- an evaporator absorbing heat from a heat source and a condenser dissipating heat away.

Interestingly, the circulation of the liquid inside the pipes is driven by capillary action, the same process plants use to fight gravity (via surface tension and adhesive forces) in order to send water from the roots to their leaves.

The technology is still in its experimental phase, but Fujitsu hopes to implement it in consumer devices, communications infrastructure, medical equipment and wearables by 2017.

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