

CLAIMS

1. A printhead module comprising a monolithic substrate having a plurality of rows of print chips mounted thereon, wherein each row of print chips receives power and data
5 through a respective longitudinal slot defined through a thickness of the substrate, each longitudinal slot extending parallel with and offset from the rows of print chips.
2. The printhead module of claim 1, wherein the monolithic substrate has longitudinal ink supply channels defined therein, each ink supply channel extending parallel with the rows
10 of print chips.
3. The printhead module of claim 2, wherein the longitudinal slots are alternately arranged with the longitudinal ink supply channels in the monolithic substrate.
- 15 4. The printhead module of claim 3, wherein a plurality of fingers extend from opposite ends of the monolithic substrate, each finger containing a portion of a respective longitudinal ink supply channel and not a portion of any longitudinal slots.
5. The printhead module of claim 1, wherein the monolithic substrate is comprised of a
20 material selected from the group consisting of: polymers, metal alloys and ceramics.
6. The printhead module of claim 1, wherein each substrate has opposite first and second faces, the first face having one or more first PCBs mounted thereon and the second face having one or more second PCBs mounted thereon.
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7. The printhead module of claim 6, wherein the first and second PCBs are generally perpendicular to each other.
8. The printhead module of claim 6, wherein the first and second PCBs are connected
30 via electrical connectors extending through longitudinal slots defined in the substrate.
9. The printhead module of claim 8 comprising a plurality of first PCBs, each row of print chips being electrically connected to a respective first PCB.

10. The printhead module of claim 9, wherein each print chip is electrically connected to its respective first PCB via wirebonds.

11. The printhead module of claim 6, wherein each second PCB comprises one or more
5 external connectors selected from the group consisting of: a power connector and a data connector.

12. The printhead module of claim 6, wherein each ink supply channel has a base defining a plurality of ink outlets and a roof comprising an elongate flexible film, and
10 wherein each print chip receives ink from one or more of the ink outlets.

13. The printhead module of claim 12, wherein the elongate flexible films are covered with a rigid cover.

14. The printhead module of claim 1, wherein each one of the longitudinal ink supply channels is aligned with a respective one of the rows of print chips.

15. A modular inkjet printhead comprising a plurality of printhead modules according to any one of the preceding claims arranged end-on-end.