

IBM, AI

- , AI



2024 12 10, – IBM AI (co-packaged optics : CPO) ,
IBM (Polymer Optical Waveguide, PWG) , IBM CPO , ,

GPU

IBM IBM [1] , CPO , GPU , AI .

:

- (interconnect) 5 [2] AI , 1 .
- CPO (wiring) (LLM) 5 . LLM 3 3 , GPU [3] .

• AI , 5,000 .[4]

IBM (Dario Gil) “ AI . (CPO) ” , “ , AI ” .

CPO AI . 2nm , 7nm 5nm , , (VTFET), DRAM, IBM .

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80

. IBM 2 (nm) 500 . CPO (interconnection) . IBM 80 .

IBM CPO 6 , ‘ (beachfront density)’ . 3 , . IBM 50 (PWG) .

IBM 50 (PWG) CPO . -40°C 125°C , 18 (PWG) . 4 128 .

[1] arXiv

[2] 5 (picojoule) 1

[3] GPU 700 LLM

[4] GPU LLM(: GPT-4)