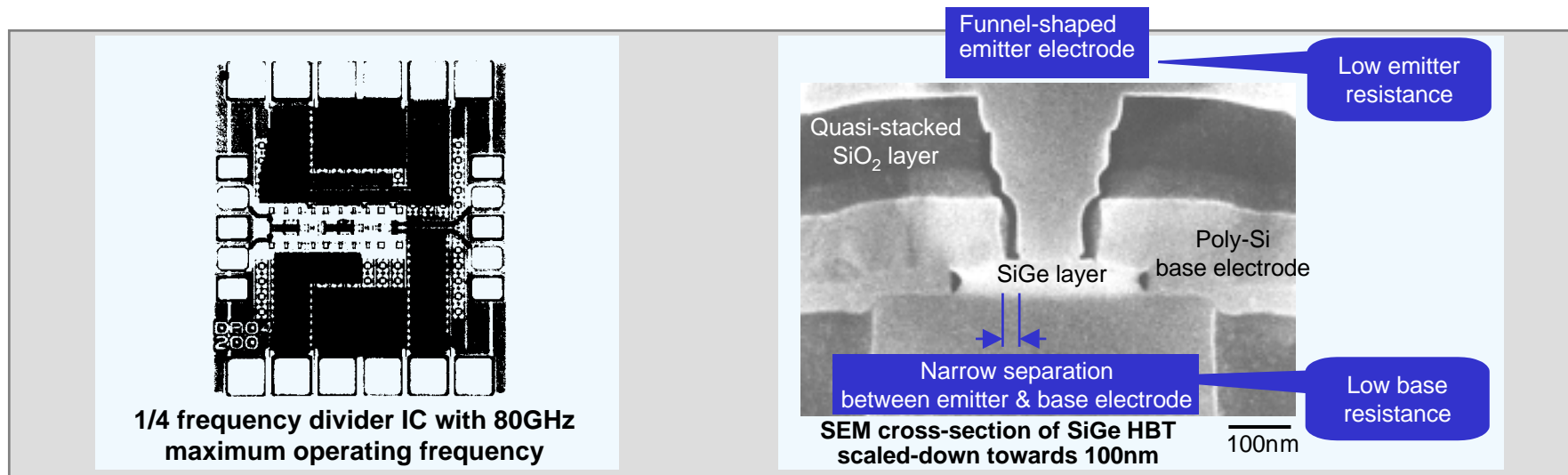


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## World's fastest logic circuit with 80GHz maximum operating frequency - 100nm SiGe HBT and 130nm SiGe BiCMOS technology -



The Central Research Laboratory and Device Development Center, both of Hitachi, Ltd., have developed both SiGe HBT scaled-down towards 100nm and 130nm SiGe BiCMOS technologies, and have achieved a logic circuit with the fastest maximum operating frequency of 80GHz for next-generation ultra-high speed communication LSIs. These device technologies will become indispensable in future large-capacity communication systems, and will pave the way for the realization of optical-fiber-link LSIs and next-generation millimeter-waveband wireless communication ICs.