



DIRAMICS

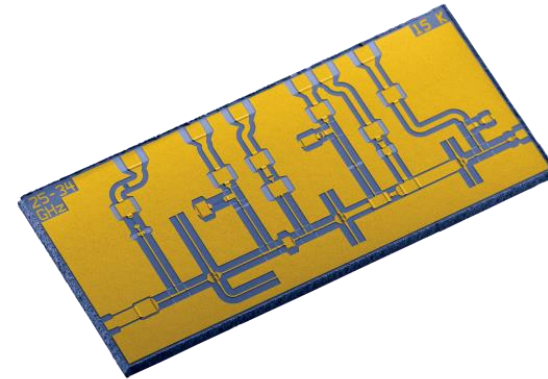
Ultra Low Noise Transistors & Circuits

Products



Discrete InP HEMTs

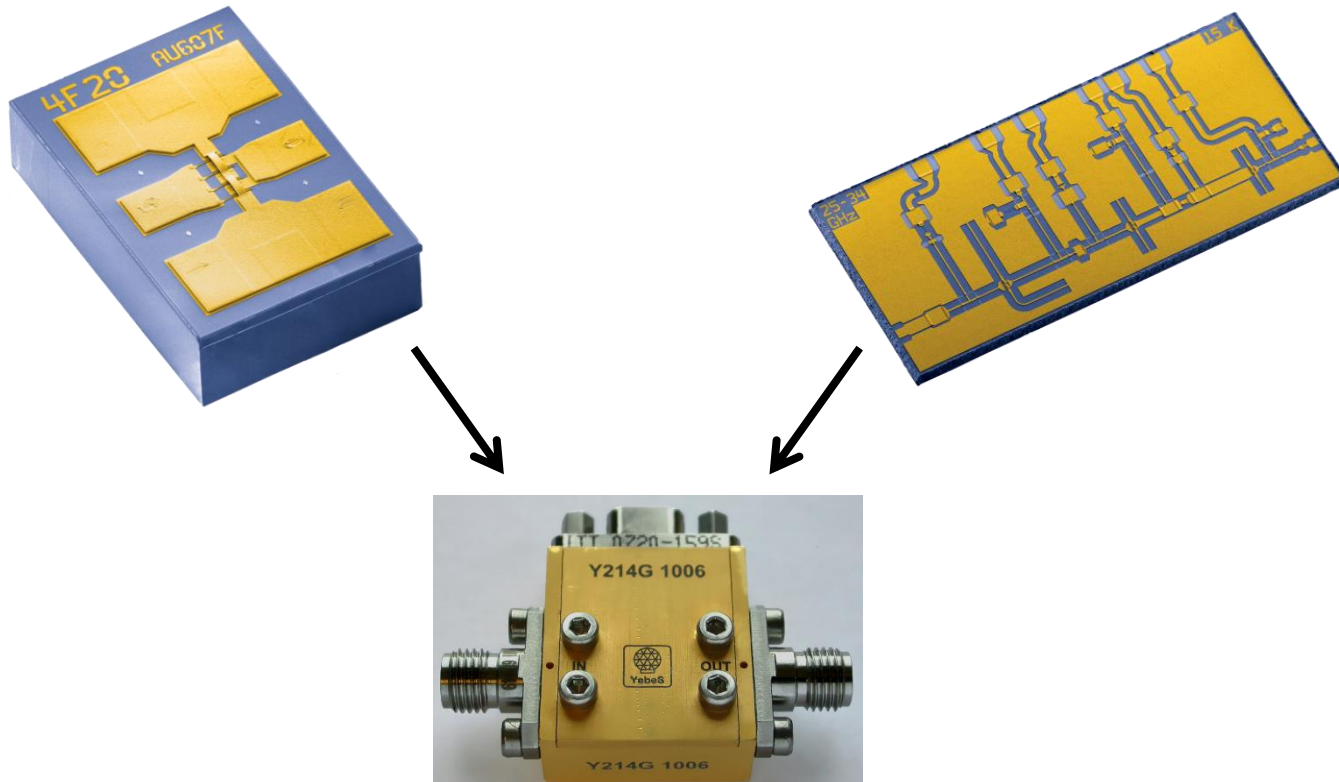
- based on decades of research at ETH Zurich
- better performance than GaAs mHEMT
- field proven: ESA, Yebes Observatory, ...



InP HEMT based circuits

- currently in prototyping / 0-series phase
- expected to be available as regular product in 2020

Products



- usually used in LNA modules
- integrated circuits can also be directly built into more complex systems

LNA benefits

Low Noise Amplifiers Allow

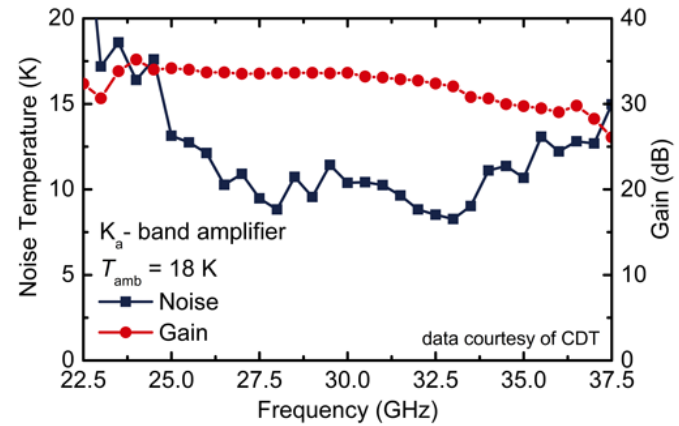
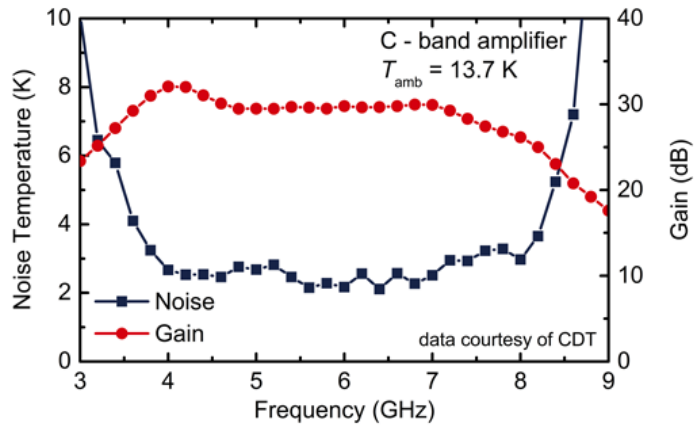
- Higher Data Rates
- Detection of Weaker Signals
- Decoding of Noisier Signals

Examples:

- replacing the existing LNAs in the ESA ground-stations allows for up to 60% increase in data received from space missions
- elimination of the need for cryogenic cooling of receivers

Examples

Cryogenic LNA Modules



Examples

Room Temperature LNA Module

