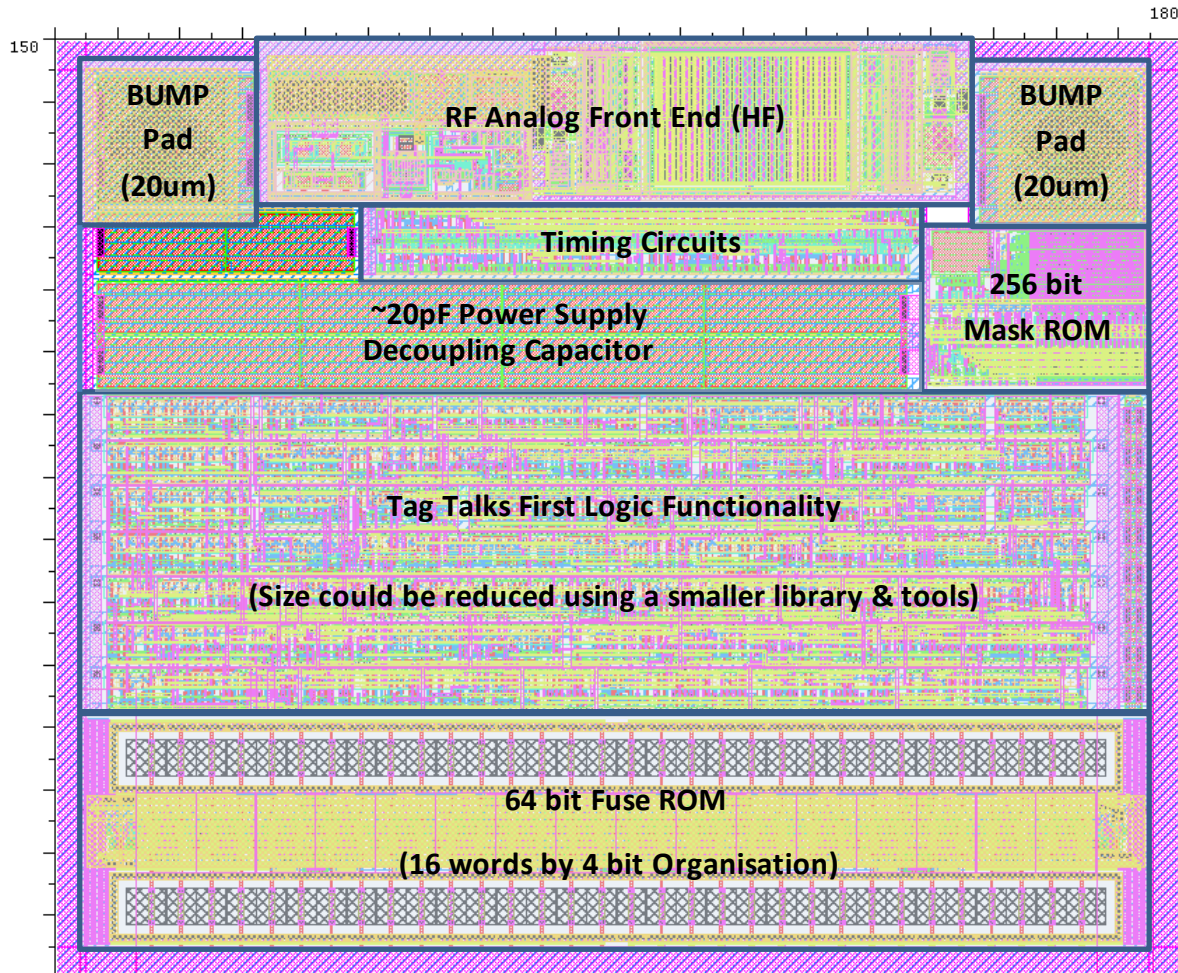




ID for the Internet of Things (IDIoT)

A simple, ultra low-cost RFID chip to allow objects to interact with their environment.



Features:

- 256 bit message length: 64 bits unique per chip (other configurations are possible).
- >550,000 die per 200mm wafer (~\$0.001/chip). Each chip is just 180µm x 150µm.
- ISO 14443-A Air Interface Protocol.
- Readable using an NFC compatible Phone (may require dedicated App) or other ISO 14443 compatible readers.
- Laser Fuse memory: mature and low cost (used to be used extensively in DRAM manufacture). Up to 2^{64} unique devices per manufacturing run.
- Mask ROM to hold fixed content (e.g., promotion details or object characteristics). Single layer (via) programmable, so only back-end layers need to be made to change contents, and only a single mask required for up to 2^{64} devices.
- Full NFC compatibility is possible by increasing the digital logic functionality to incorporate interpretation of the 14443-A command set (requires a larger die size though).