

# Integrated Byte Instruction Processor (IBIP)

alias Daffodil/Daisy "P-chip"

## Architecture Features:

- o Dandelion CP "look-alike"  
Existent microcode is "transportable" (Mesa, InterLisp, Smalltalk)  
16-bit data paths
- o No microtasking  
No click structure, No "c1-c2-c3 waltz"
- o Off-chip Microstore  
48-bit Microinstruction  
8K Microstore (up to 64K)
- o Byte code instruction fetch unit (IFU)  
8 Bytes
- o "Self-timed" memory interface (AP bus)  
Double word fetch
- o On-chip clock generator  
Clock is suspended while waiting for A Chip

## Technology Features:

- o Lambda design rules, ( $\lambda = 2$ , min feature size =  $4 \mu\text{m}$ )
- o Estimated die size: 8.0 mm x 8.0 mm
- o Polycide (No buried contacts & No second layer metal)
- o Estimated number of transistors: 30K
- o Estimated max power: 1.5 W
- o Estimated cycle time: 140 nS