



# Vision and context



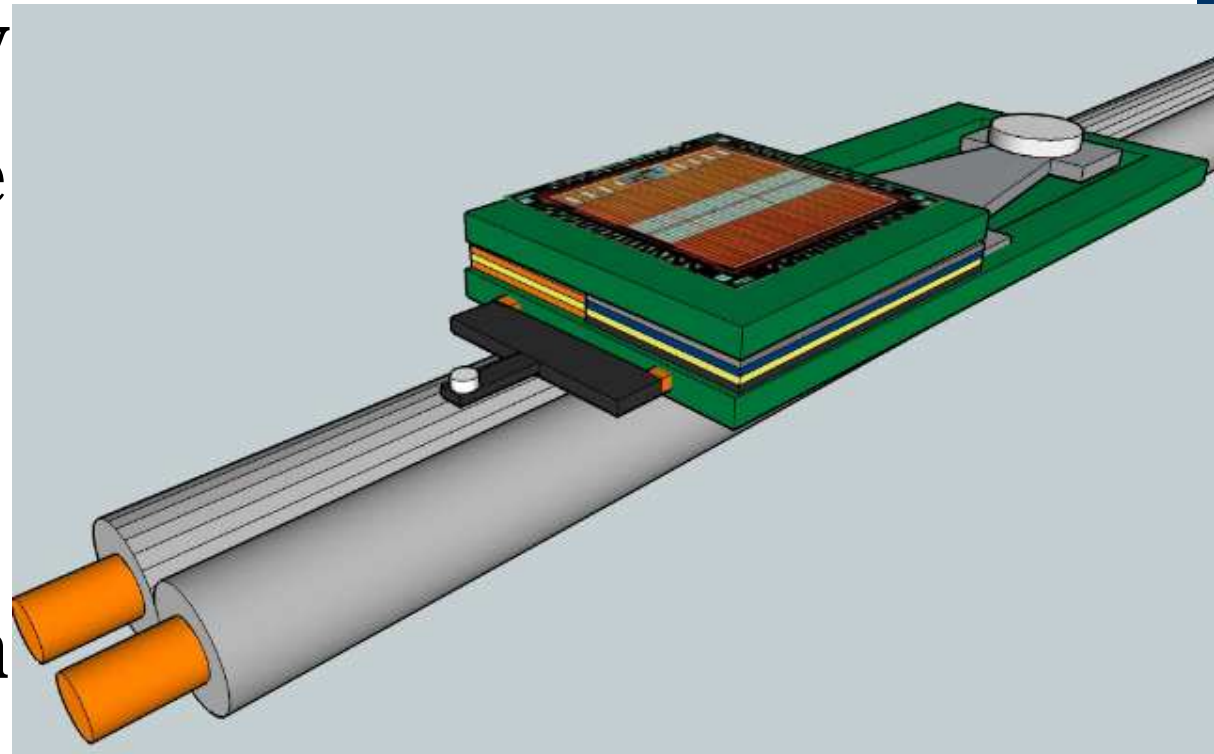
- ★ **Integrated project**

  - w Architecture, Engineering, Human factors

- ★ **10 x 10 technology**

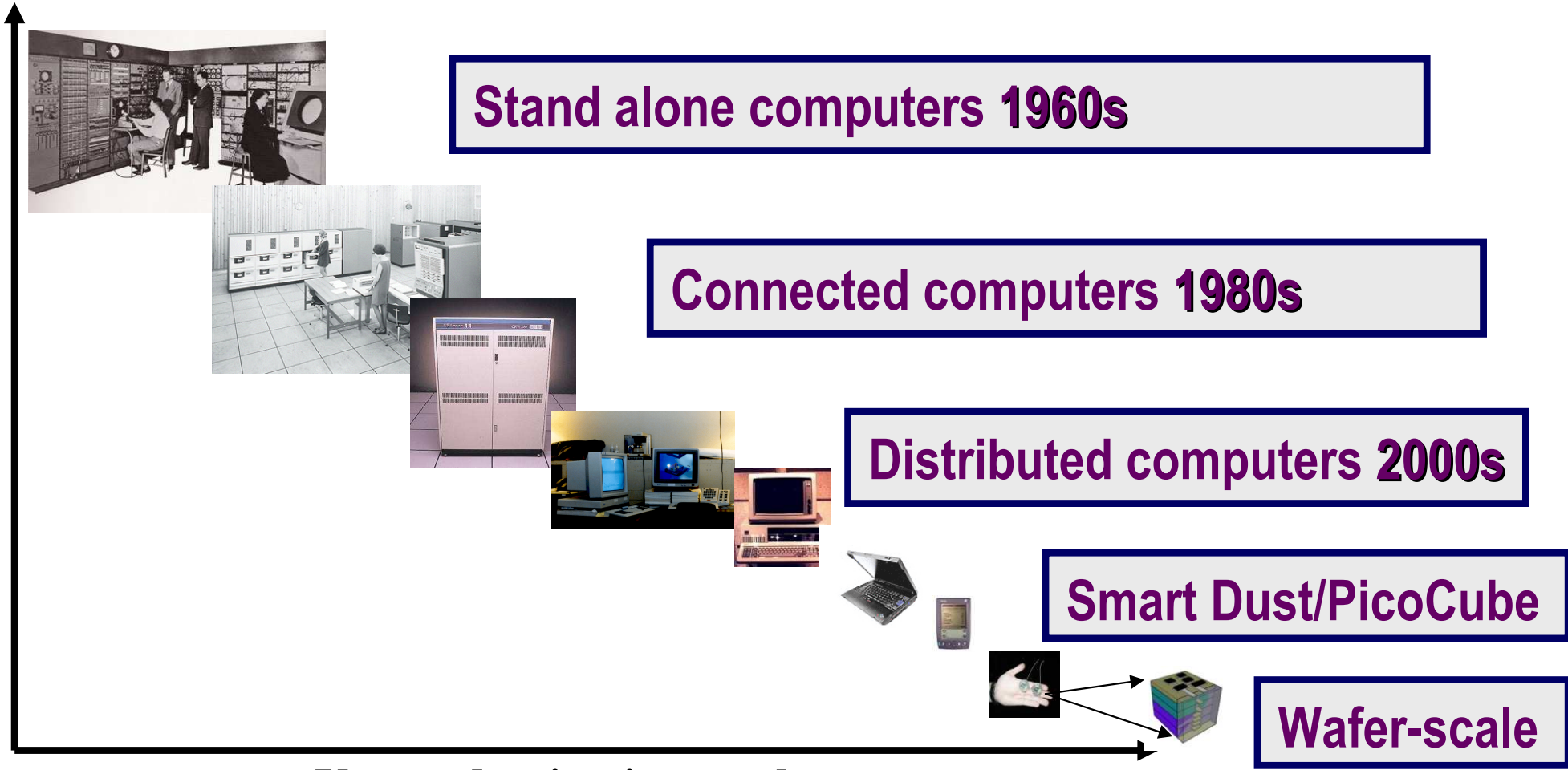
- ★ **Mote of the future**

- ★ **Place anywhere  
anytime --  
integrated into  
any energy system**





# Macro to Micro to CMOS Systems

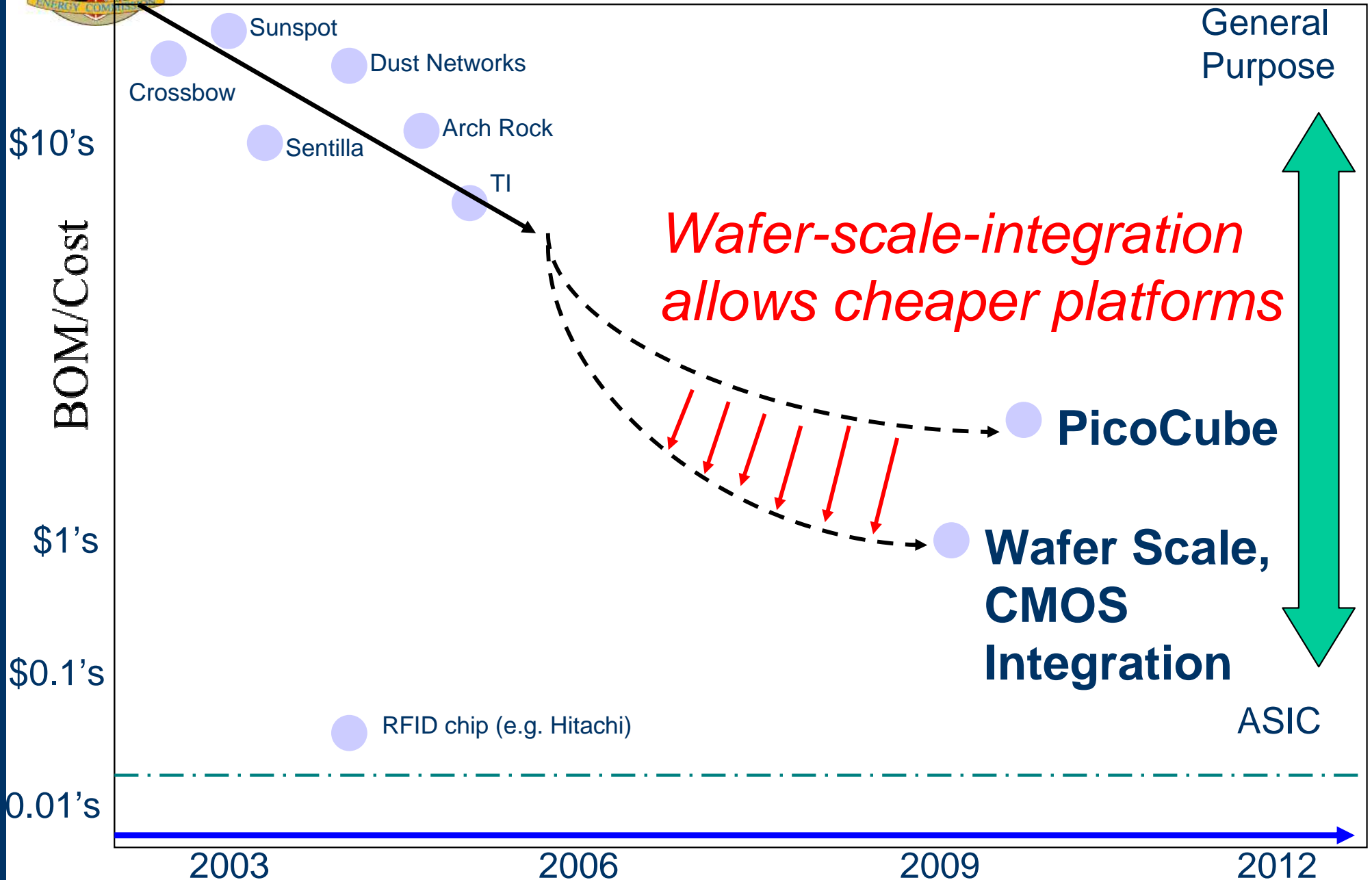


**Vast reduction in cost, but  
additional capability →**

Adapted from Various Sources:  
E.g. G. Bell, R. Newton, J. Rabaey, D. Culler, K. Pister, P. Wright

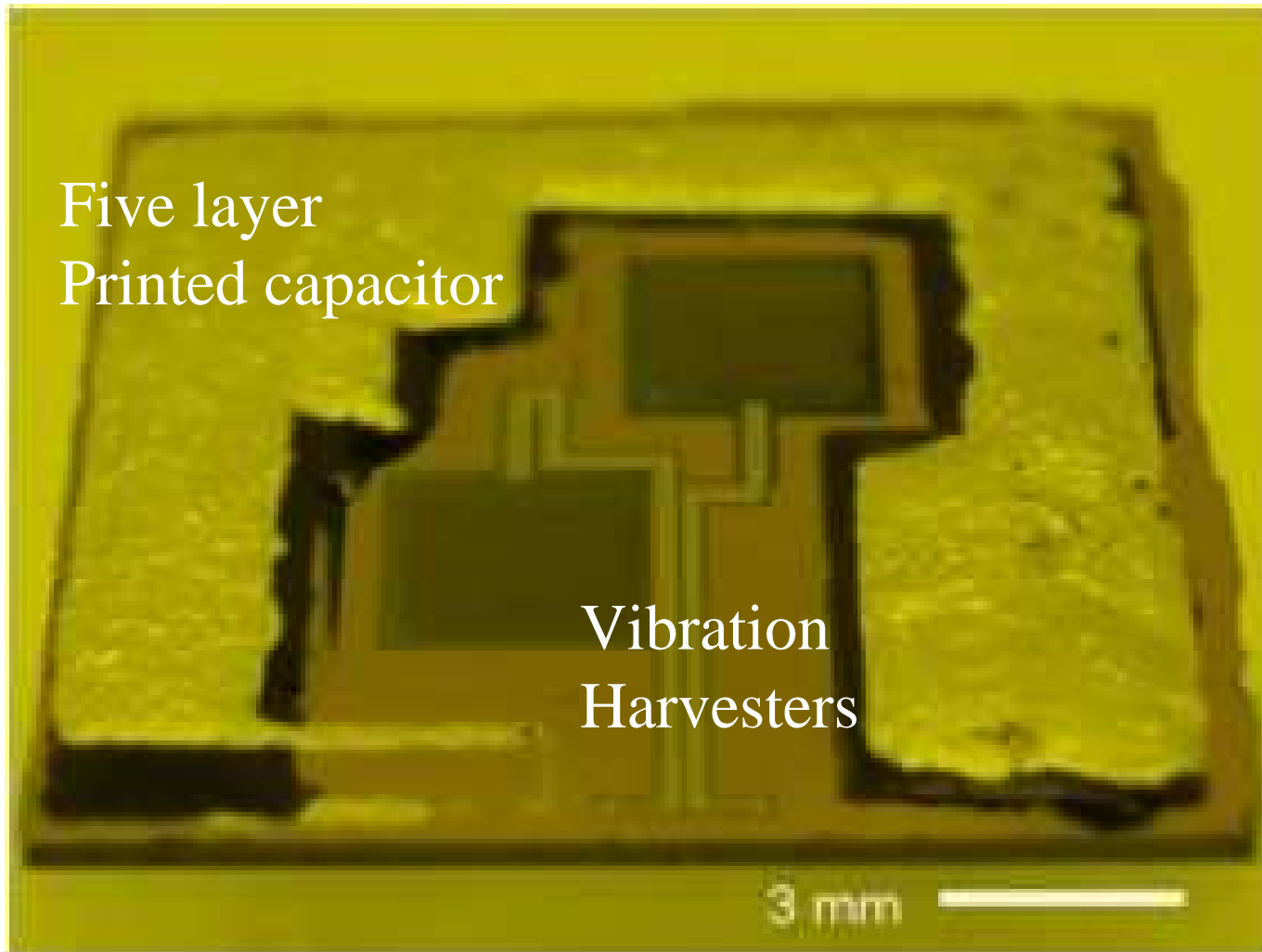


# Cost reduction over a decade





# Wafer-scale, integrated energy harvesting and storage – first results



Five layer  
Printed capacitor

Vibration  
Harvesters

3 mm