

# K2 Energy AGM

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Presentation by Robert J Mears

November 22, 2011

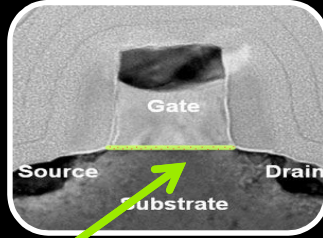
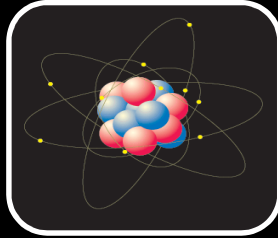
# Executive Summary

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- Introduction
- Importance to K2 Energy
- Mears Technologies Company Overview
- Market opportunity
- PV program update

# Mears Technologies

Innovations  
World-Class Designs  
Manufacturing Solutions



**Silicon** Reengineered  
= ↓ ↓ ↓ Power +  
↑ ↑ ↑ Performance

↑ ↑ ↑ Yield  
for  
Manufacturers

↑ ↑ ↑ Utility  
for  
End-Users

# IP licensing business model

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Licensing\*

Patent Development

Innovation

(\* ) Patents, Trade Secrets

# Company Overview

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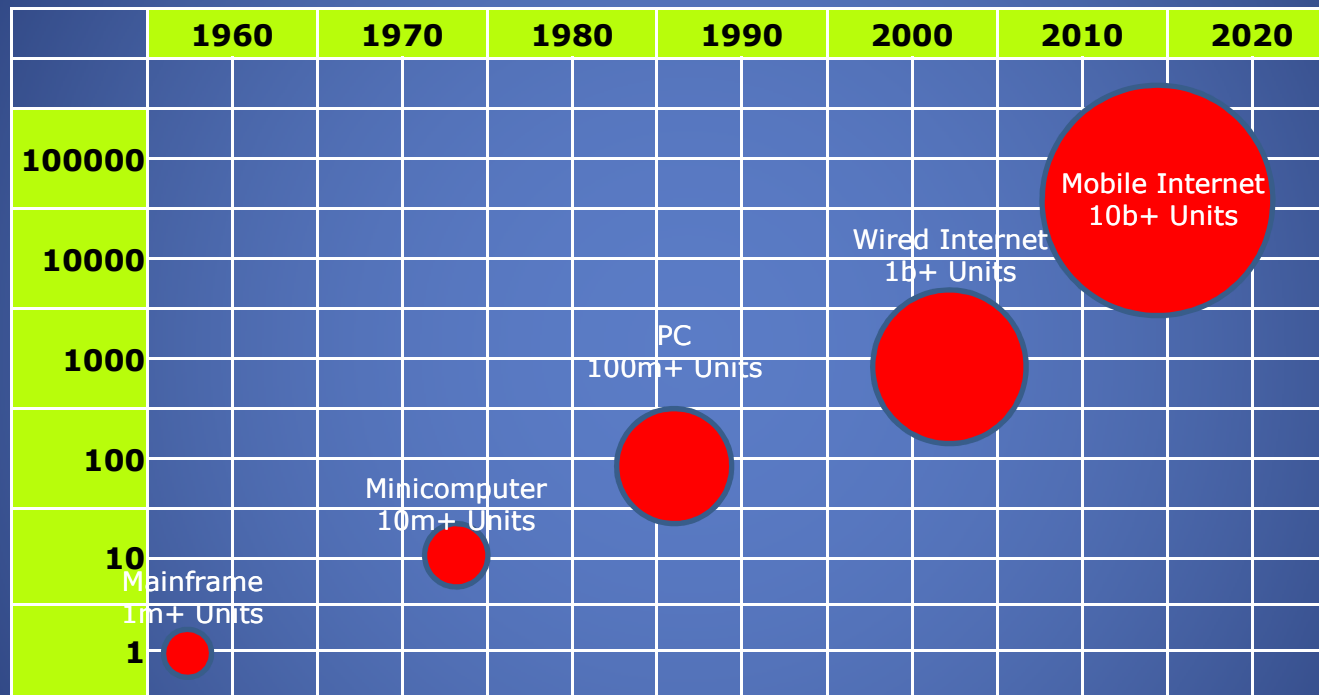
- Mears is committed to developing and commercializing technologies which will significantly reduce power and improve efficiency for Semiconductors
- 100+ Patents Granted (60+ Pending)
- Restructured for growth
- New commercially focused management team
- Located: Newton, Massachusetts (USA)

# Mears Technologies and K2 Energy

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- K2 is a major stockholder in Mears Technologies
- K2 holds 8% of the issued share capital of Mears Technologies Inc.
- K2 holds warrants which if exercised would increase K2's interests to up to 15% of Mears Technologies Inc.

# Operating at the heart of \$1.7 Trillion Electronics Industry - huge opportunity for Mears and K2



Smart Phone CAGR + 33%  
Tablet CAGR + 65%

## PV Solar program update

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- MST-PV benefits: significant increase in optical absorption; PV junction control
- May 2010: Optical characterization – up to 10x higher absorption
- May 2011 Electrical characterization – verified PV junction control
- Issue limiting efficiency identified – higher recombination: Sept 2011
- Detailed analysis – Sept-Nov 2011
- Re-verified optical absorption measurements at different lab (Berkeley)
- Cell construction: crystalline growth verified
- Analysis points to poor transport perpendicular to film
- New (horizontal) cell design: results expected Q1 2012





# SUMMARY

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## Key Milestones for 2012

- MST CMOS commercialization
- Engagement with PV manufacturer