

TABLE OF CONTENTS

LIST OF FIGURES 3

ABOUT THE IC FOUNDRY ALMANAC 5

EXECUTIVE SUMMARY 6

SECTION I: IC FOUNDRY ANALYSIS..... 8

IC FOUNDRY INDUSTRY ANALYSIS 8

Pure-Play/IDM Definitions 8

IC Foundry Forecast Through 2013..... 8

2001 TSMC Example (Insight into the 2009 inventory adjustment?)..... 12

Foundry Sales "Impact" 14

IC FOUNDRY SALES ANALYSIS 16

IC Foundry Sales by Company 16

Foundry Sales by Customer Type 20

Foundry Sales by Region..... 22

Foundry Sales by Application 24

Foundry Sales by Product Type 27

Foundry Revenue per Wafer 28

Foundry Sales by Feature Size 29

IC FOUNDRY CAPACITY 32

SECTION II: WAFER FABRICATION PRICING TRENDS 38

OVERVIEW 38

WAFER PRICING 38

Average Price Per Wafer and Median Price by Quarter (150mm, 200mm, 300mm) 39

Average Price Per Wafer and Median Price by Quarter (200mm, Manufacturing Process)..... 43

Average Price Per Wafer and Median Price by Quarter (200mm, Process Geometry)..... 44

Average Price Per Wafer and Median Price by Quarter (200mm, Metal Layers) 46

Average Price Per Wafer and Median Price by Quarter (200mm, Poly Layers)..... 47

Average Price Per Wafer and Median Price by Quarter (200mm, Epitaxial)..... 48

Average Price Per Wafer and Median Price by Quarter (200mm, Development Stage) 49

Average Price Per Wafer and Median Price by Quarter (200mm, Volume of Wafers Purchased) 49

MASK COST 50

Average Mask Set Cost and Median Cost by Quarter (150mm, 200mm, 300mm)..... 50

Average Mask Set Cost and Median Cost of Leading Revenue-Producing Fabless Companies by Quarter (200mm)..... 51

Average Mask Set Cost and Median Cost by Quarter (200mm, Company Type) 52

Average Mask Set Cost and Median Cost by Quarter (200mm, Foundry Location)..... 53

Average Mask Set Cost and Median Cost by Quarter (200mm, Manufacturing Process)..... 54

Average Mask Set Cost and Median Cost by Quarter (200mm, Process Geometry)..... 55

Additional Purchase Details 57

Additional Wafer Specifications 57



FOUNDRY DETAILS 59
 Foundry Type..... 59
 Shuttle Service..... 60
 End Market Data..... 61
Q2 2008 CAPACITY SURVEY RESULTS 61
SURVEY METHODOLOGY 66
 Wafer Formulas 66
 Mask Formulas 66
 Raw Data Tables..... 66
INTERACTIVE, ONLINE RESULTS 67
GSA CONTACT INFORMATION 67