

### Key Features

- UMC's 0.25μm 2.5V/3.3V Logic Process
- 3.3V with 5V tolerance input, 3.3V output drive
- Output buffer with programmable drive strength from 2mA to 8mA with 2mA step, 4mA to 16mA with 4mA step
- Input buffer with programmable pull up resistance, pull down resistance, keeper, and Schmitt trigger
- Built-in Antenna diodes for all pins
- ESD Robustness and Latch-up immunity proven by Silicon

### General Description

This library is tailored for UMC's 0.25μm 2.5V/3.3V Logic Process. All I/Os are equipped with a rich selection of programmable features capable of adapting to a wide variety of application environments. Two layout structures, both optimized for pad limited and core limited designs, are available to support each programmable feature or function.

### Quick Reference

Characteristic		Description
<b>Physical</b>	Process	UMC 0.25μm 2.5V/3.3V 1P5M Logic Process
	Cell Width * Cell Height	36.12μm * 237.36μm (Staggered) 62.78μm * 141.90μm (In-line)
	Cell Layout Metal	M1, M2, M3
	Power Ring Metal	M3 and above
	Layout resolution	0.01μm
<b>Electrical</b>	Recommended Operating Conditions	Power Supply Voltage Core: 2.25V to 2.75V I/O: 2.97V~3.63V
		Junction Temperature: -40°C ~ 125°C
	Driving Strength	2mA~8mA by 2mA step, 4mA~16mA by 4mA step
	Input Threshold	LVTTL
	Pull Up/Down resistance	75K Ohm

#### HEADQUARTERS

Hsinchu, Taiwan,  
 Tel: 886-3-578-7888  
 Fax: 886-3-578-7889  
 sales@faraday-tech.com

#### USA OFFICE

Sunnyvale, USA  
 Tel: 1-408-522-8888  
 Fax: 1-408-522-8889  
 sales@faraday-usa.com

#### EUROPE OFFICE

Hoofddorp, Netherlands  
 Tel: 31-2356-20496  
 Fax: 31-2356-36297  
 eusales@faraday-tech.com

#### JAPAN OFFICE

Tokyo, Japan  
 Tel: 81-3-5214-0070  
 Fax: 81-3-5214-0076  
 sales@faraday.co.jp

#### CHINA OFFICE

Shanghai, P. R. China  
 Tel: 86-21-6406-7523  
 Fax: 86-21-6406-5327  
 sales@faraday.com.cn