UNITED MICROELECTRONICS 89



UA1300 SERIES

Gate Arrays

Features

- Silicon-gate 2.0 micron (drawn) double metal HCMOS technology.
- Speeds higher than 74/TTL-1.7ns through 2-input NAND gate and interconnection, T_A = 25°C, fanout = 2, V_{DD} = 5V
- Optimal block structure of 2N and 2 P transistors
- Complexities ranging from 1300 to 3060 gate counts
- Pin counts ranging up to 96

- Fully supported by DAISY system
- Extensive macrocell and macrofunction libraries
- All non-power pads configurable as inputs, outputs, or bidirectional I/O
- Configurable output drive up to 12 mA under worst-case commercial conditions
- All inputs and outputs protected from over-voltage and latch up

Product Outline

Device Number	Gate Complexity	I/O Buffer	V _{DD} Pads	V _{SS} Pads	Max. Pads	Gate Speed (ns)'	
						Тур.	Max ²
UA1313	1320	50	2	2	54	1.7	2.5
UA1318	1820	66	2	2	70		
UA1322	2240	80	2	2	84		
UA1330	3060	92	2	2	96		

Notes: 1. 2-input NAND gate, fanout = 2, and typical interconnection.

- 2. $T_A = 0$ to 70° C, $V_{DD} = 5$ V ± 5%.
- 3. Including 2 pads without I/O buffer.

