Vertical LPCVD/Furnace System

VF/VLF series

ULTECH Co., Ltd.

Vertical LPCVD/Furnace

		
VF-001	**VF-003**	**VLF-003**
• Annealing • 6inch wafer, 5 wafers/batch (include dummy) • 1-zone heater, max.1000℃ • Alumina reactor • Alumina pedestal & boat up/down (motor) • PC control	• Firing • 6inch & 156mm*156mm wafer, 5 wafers/batch (include dummy) • 1-zone heater, max.1000℃ • Quartz reactor • Quartz pedestal & boat up/down (motor) • Flow meter : O2(10slm), N2(10slm) • PLC & Touch control	• Oxidation & P-type diffusion(BBr3) • 6inch wafer, 4 wafers/batch (include dummy) • 1-zone heater, max.1150℃ • Quartz reactor • Quartz pedestal & boat up/down (motor) • Heater up/down (motor) • Rotary pump (fomblin oil type) • Throttle valve + APC controller • MFC : N2(10slm), N2(500sccm), O2(500sccm), Cl2(100sccm) • PC control
Annealing in ATM	***Firing in ATM***	***Oxidation/Diffusion in Vacuum***

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Vertical LPCVD/Furnace

		
VLF-004	**VLF-006**	**VLF-008**
● Doped poly Si LPCVD ● 6inch wafer, 50 wafers/batch (include dummy) ● 3-zone heater, max.1200℃ ● Quartz reactor + inner tube ● Quartz pedestal & boat up/down (motor) ● Robot arm for wafer auto loading to boat ● Dry pump ● Throttle valve + APC controller ● MFC : SiH4(500sccm), PH3(50sccm), N2(1slm) ● PC control	● Annealing ● 4inch wafer, 50 wafers/batch (include dummy) ● 3-zone heater, max.1250℃ ● Quartz reactor + inner tube ● Quartz pedestal & boat up/down (motor) ● Dry pump ● Throttle valve + APC controller ● MFC : N2(5slm), O2(5slm) ● PC control	● Tube#1 - Wet oxidation Tube#2 – Silicon nitride LPCVD ● 12inch wafer, 50 wafers/batch (include dummy) ● 3-zone heater, max.1200℃ ● Quartz reactor + inner tube ● Quartz pedestal & boat up/down (motor) ● Dry pump ● Throttle valve + APC controller ● Heating mantle for H2O (3000cc) ● MFC: Tube#1 - O2(10slm),N2(10slm),O2(1slm) Tube#2 - DCS(1slm), NH3(1slm), N2(5slm), N2(500sccm) ● PC control
Doped poly Si LPCVD	***Annealing in Vacuum***	***2-tube, Oxidation & Silicon Nitride***

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