

www.sitrigroup.com

Weibo



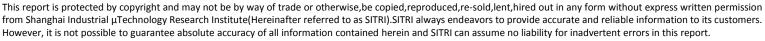
Wechat



SiT8103

High Performance 1-110 MHz Oscillator





This report was prepared for our Clients' private study, analysis or research and for no other purpose. The information contained in this report may describe technical innovations, which are the subject of patents held by third parties. The disclosure by SITRI of any such information is in no form whatsoever an inducement to infringe any patent. SITRI assumes no liability for patent infringement arising from the use of the information contained in this report.



Table of Contents



Device Summary2
Device Summary
SiT8103 Introduction
Package Overview4
Top Bottom Side View with Measurement
X-ray Analysis for Top View and Side View
ASIC Die Information6
ASIC Die Photo with Measurement
ASIC Die Mark
ASIC Die Corner Image
Pad Size in ASIC Die
ASIC Die General Structure11
Die Thickness
Each Layer Structure and Thickness Measurement
Gate Length of Poly Gate in Logic Area
MEMS Die Information
MEMS Die Photo with Measurement

MEMS Die Mark
MEMS Die Corner Image
Pad Size in MEMS Die
Resonator Plan View
OM Plan View of Resonator and Dimensions
IR Plan View of Resonator and Dimensions
SEM Plan View of Resonator and Dimensions
Resonator Cross Section
SEM Image of Resonator Cross Section
Dimensions of Resonator Cap
Dimensions of Resonator Beam and Resonator Electrode
Dimensions of Resonator Support Element
EDS Analysis
EDS Analysis for Resonator Each Layer
Major Findings67
Process Flow of SiTime Resonator Device
Summary of SiT8103