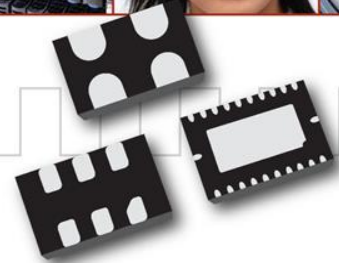




Become an Oscillator Manufacturer with the Low Cost Automated Programmer

March 2016



The Smart Timing Choice™

Low Cost Programmer Enabling In-House Oscillator Programming Capability



- Achieve 750ku/month capacity with minimum upfront investment
- Ensure shortest lead time for any combination of frequency, stability, voltage and package
- Enable same day ship for urgent orders
- Eliminate any risk of dead stock with field programmable devices
- Lower transaction cost and increase margin by buying in large lots from SiTime and ship locally to local customers

Summary - DediProg DP2000 Automated Programming System



- Tape-in and tape-out
- 8-sites socket adaptor specific for SiTime
 - One socket adaptor per package size
 - 8 sockets of the same package size per adaptor
 - Parallel programming for higher throughput
- Up to 2400 UPH throughput (same pkg size)
 - 750ku/month assuming two 8-hour shifts per day, 20-working days/month
- Support for all SiTime packages
 - QFN first followed by CSP implementation
 - New packages can be added with new adaptors
- Vertical and horizontal infrared inspection prior to taping
- Optional features
 - CCD camera for pin-1 and empty socket inspection prior to programming
 - Optional Ink marker



Socket Adaptor



DP2000 Programmer Cost and Availability



- \$63,000 per system (Excluding accessories, installation and training)
 - Base programming system
 - 8mm tape feeder
 - 2 positioners for each package type (both are needed simultaneously)
 - 6 programming socket adaptors (not including CSP & QFN 2012)
- Consumable cost for the sockets
 - Package and operator dependent (next slide)
- Availability
 - Late Q2, 2016 for initial availability
 - 8 weeks on-going lead time once programmer is available
- Service and warranty
 - Warranty: 1 year
 - Maintenance: Local service rep available in selected regions

40% Discount off Standard Socket Costs



Package Type	# of Pin/Ball	Size (mm x mm)	Supported	Standard Socket Cost	SiTime Partner Cost
QFN	4, 6	7.0 x 5.0	✓	\$85	\$51
	4, 6	5.0 x 3.2	✓	\$85	\$51
	4	3.2 x 2.5	✓	\$85	\$51
	4	2.5 x 2.0	✓	\$110	\$66
	4	2.0 x 1.6	✓	\$110	\$66
	4	2.0 x 1.2	Phase 2	\$110	\$66
SOT23	5	2.9 x 2.8	✓	\$170	\$102
CSP	4	1.5 x 0.8	Phase 2	TBD	TBD

Notes: All sockets have minimum guaranteed 10,000 cycles of usage before refresh, but can be up to 20,000 cycles or more depending on the quality of the operators

Dediprogram Overview



- Taiwan based IC programming solution provider
 - Founded in 2005, with design center in Taiwan and Shanghai
 - Website <http://www.dediprogram.com/>
- Products
 - Dedicated engineering ISP IC programmers
 - Universal engineering ISP IC programmers
 - Universal production IC programmers
 - Semi-auto tape & reel taping machine automatic IC programming systems
- IC programming service
 - Programming facility in Taiwan
- Customer examples
 - Semi: ST Micro, AMD, Spansion, Intel, Nvidia, Micron, SMSC, Marvell, Broadcom
 - OEM: Apple, ASUS, ACER, Cisco, Google, IBM, Toshiba, Siemens, HP, Dell
 - ODM/CM: Flextronics, USI, Inventec, Quanta, Compal, Wistron, Pegatron