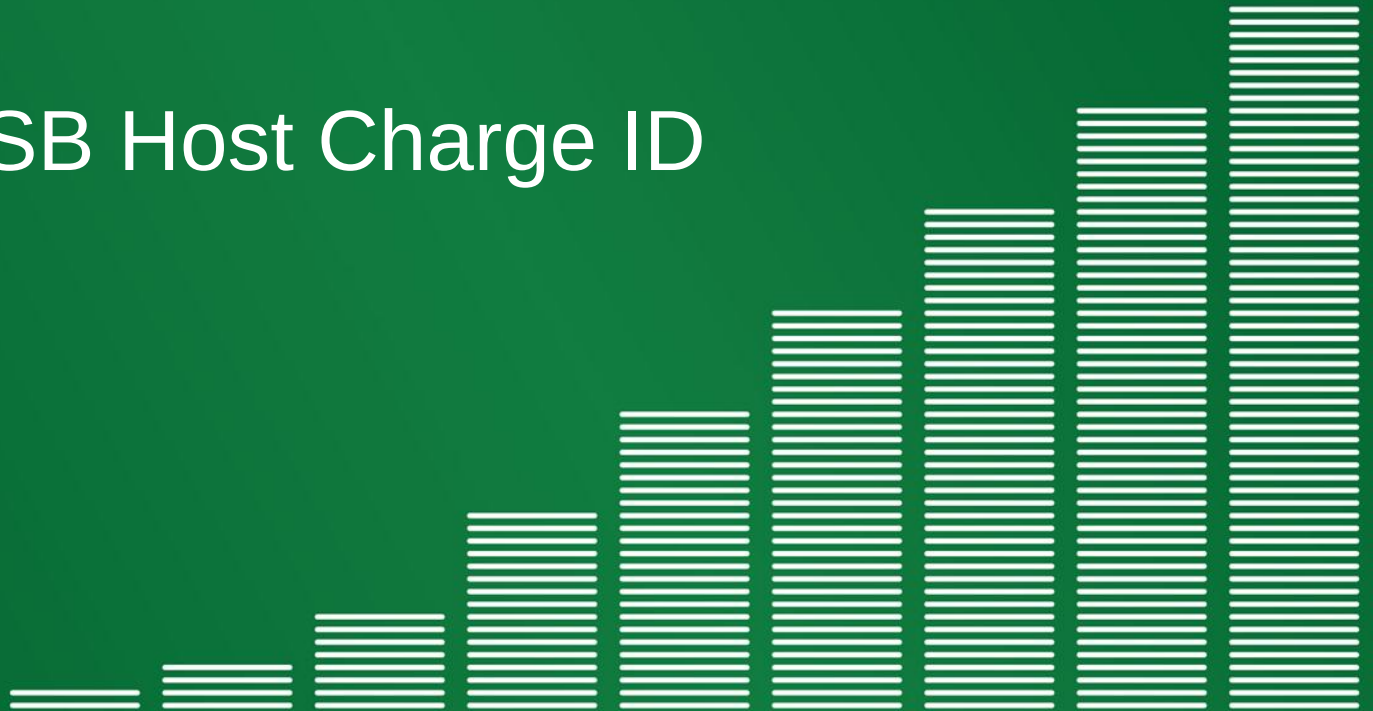




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Silego USB Host Charge ID



March 2012
Silego Technology
www.silego.com

Deloitte.
Technology Fast 500™
2010

Deloitte. 2008
Technology Fast 50
Silicon Valley ★ Rising Star

About Silego

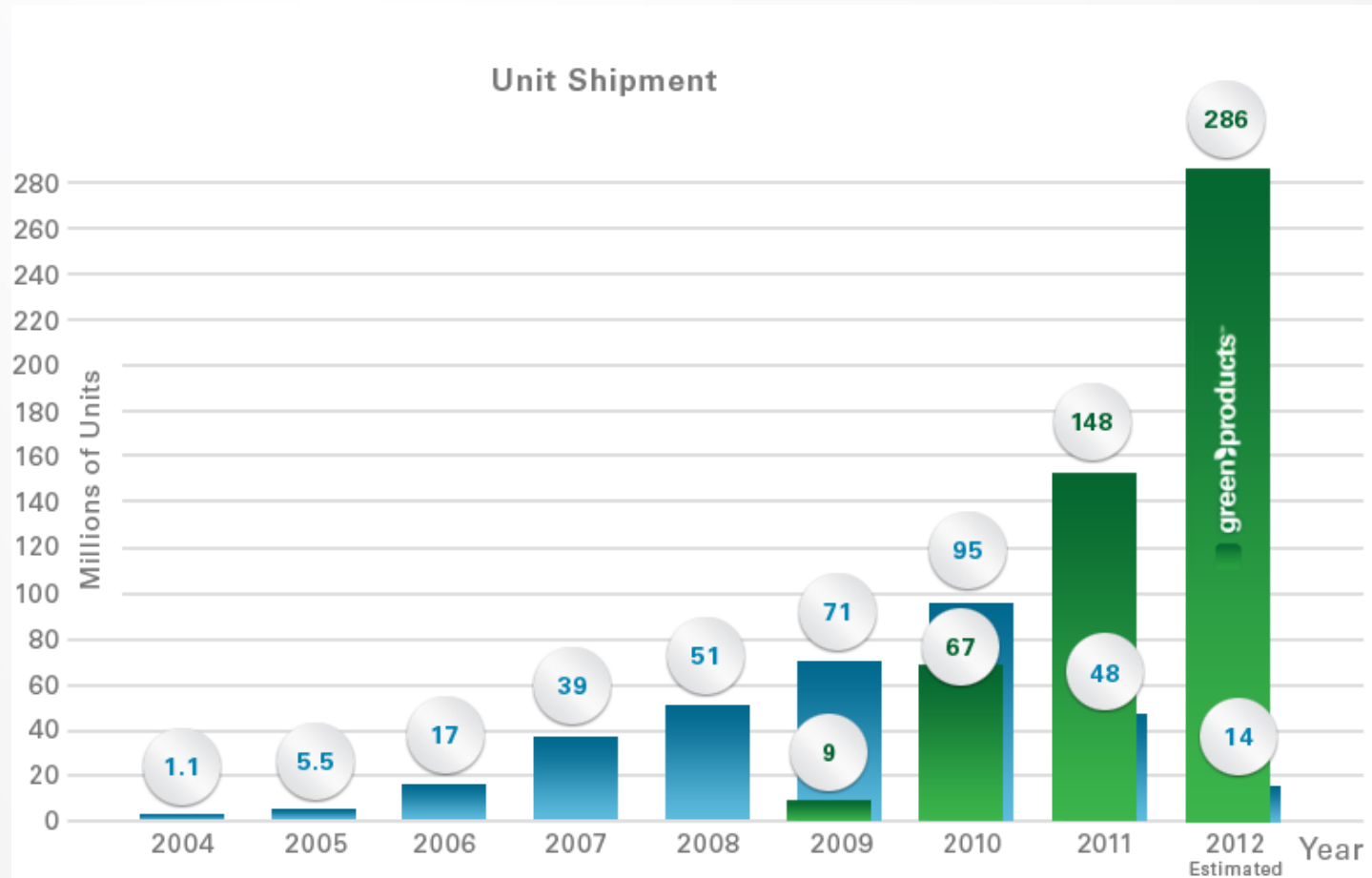


- Founded in 2001
- Four Product Lines with over 200 Products
- World-Class manufacturing
 - Foundries: TSMC, Vanguard
 - Packaging: ASE, ChipMOS, SPIL, SPEL
- Five Global Centers
 - Corporate HQ: Santa Clara, CA
 - Design Centers: USA, Korea, China
 - Operation Teams: USA, Taiwan
 - Sales and Apps Support: Global



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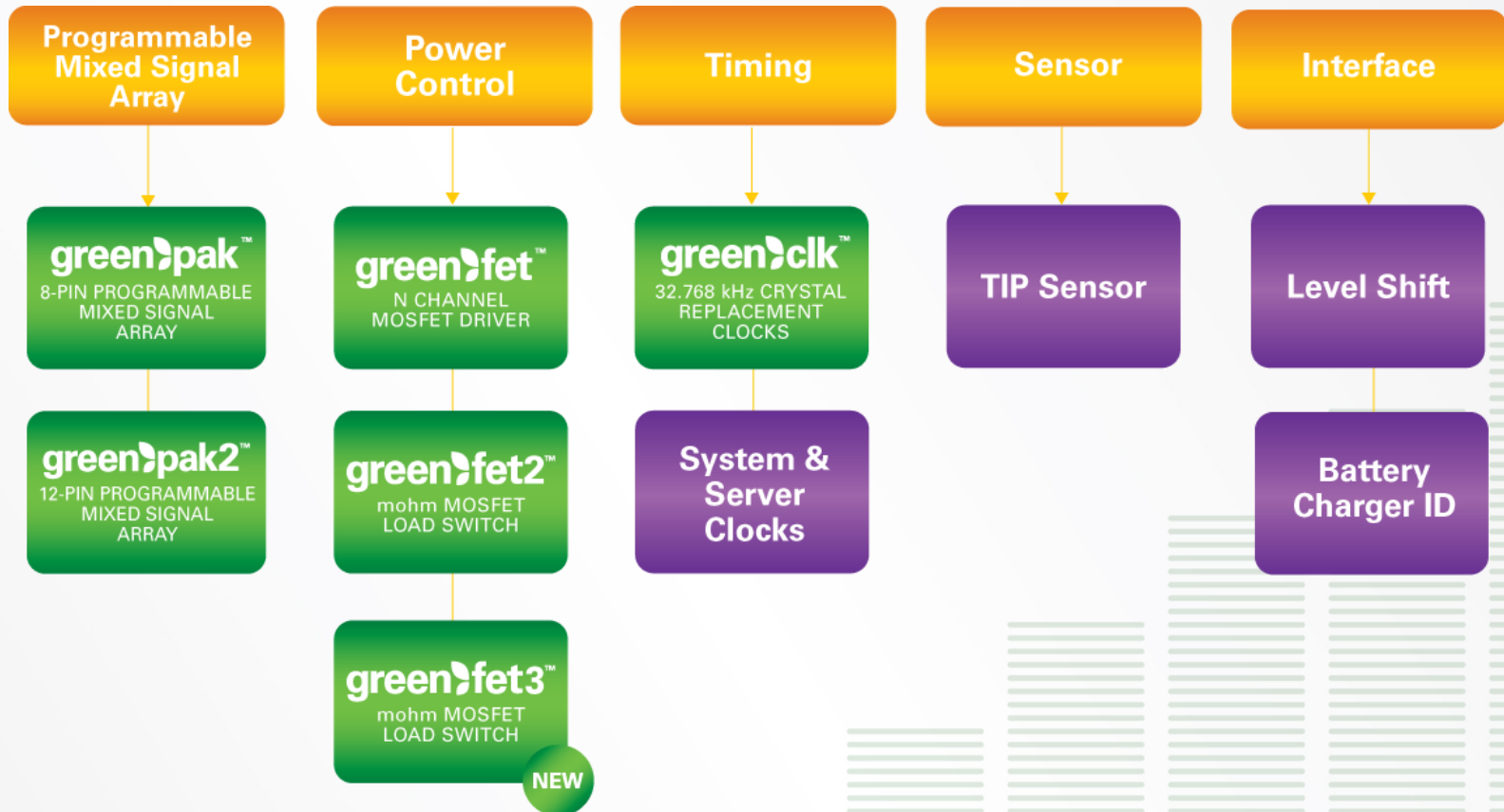
Silego Growing Exponentially





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Product Lines

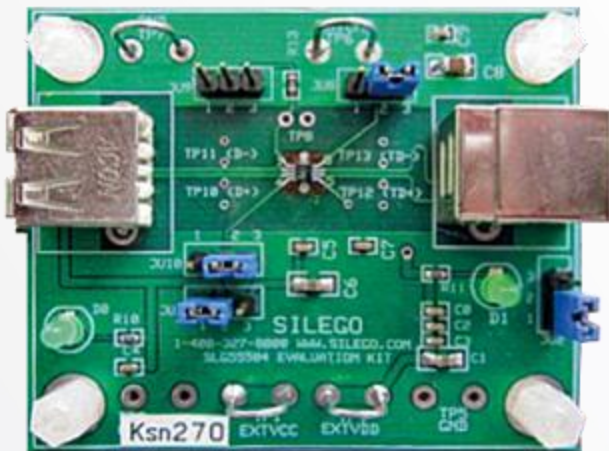




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USB Host Charge ID Function

- USB 2.0 Battery Charging specification(BC) 1.1 & 1.2
- Chinese Telecom Standard YD/T 1591-2009
- Proprietary Apple dedicated charger scheme
- Support Full/Low speed mouse/keyboard wake-up function from S3(Sleep) mode
- Support SDP, CDP, DCP Handshaking protocol
- Smart CDP-SDP function



- Small package(2x2 mm TDFN or 3x3mm TDFN)
- Low supply current



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USB Host Charge ID Family-1

- SLG55583V/SLG55583AV (2x2 mm 8TDFN) ➔ **MP Now**
 - Support Smart CDP-SDP mode, DCP protocol
 - Apple device (include iPad2 high current Charge)
 - Full / Low speed Mouse/keyboard wake up from S3

- SLG55584V/SLG55584AV (2x2 mm 8TDFN) ➔ **MP Now**
 - Support Smart CDP-SDP mode, DCP protocol, and Apple device
 - Full / Low speed Mouse/keyboard wake up from S3

- SLG55587V/SLG55587AV (2x2 mm 8TDFN) ➔ **MP Now**
 - Support SDP mode, DCP protocol
 - Apple device (include iPad2 high current Charge)
 - Full / Low speed Mouse/keyboard wake up from S3



Hot Smart CDP-SDP

- Automatic CDP-SDP mode support with SELCDP=1 for "Always Data Communication"



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USB Host Charge ID Family-2

- Support SDP, DCP protocol and Apple device
 - SLG55566V/SLG55566AV/SLG55566BV (2x2 mm 8TDFN) → **MP Now**
 - SLG55550V/SLG55550AV (3x3 mm 10TDFN) → **MP Now**
 - SLG55567V (2x2 mm 10TDFN) → **ES Now & MP ready**

**SILEGO**

USB Host Charge ID family details-1

Part Name	SLG55583V	SLG55583AV	SLG55584V	SLG55584AV	SLG55587V	SLG55587AV
CEN# for P-FET	V		V		V	
CEN for N-FET		V		V		V
BC 1.1 support	V	V	V	V	V	V
BC 1.2 support	V	V	V	V	V	V
SDP in S0	V	V	V	V	V	V
CDP in S0	V	V	V	V		
Smart CDP-SDP	V	V	V	V		
DCP in S3/S4/S5	V	V	V	V	V	V
Apple compliant devices	V	V	V	V	V	V
Apple iPad2 high current charge	V	V			V	V
Force dedicated charger mode						
EPLUG (Portable device plug-in/out detect)						
USB Keyboard/Mouse wake up in S3	V	V	V	V	V	V
RDP/RDM for external resistor divider						
Typ. Supply Current , VCB=VDD=5.5V (CB=1)	20uA(SDP) 40uA(CDP)	20uA(SDP) 40uA(CDP)	20uA(SDP) 40uA(CDP)	20uA(SDP) 40uA(CDP)	20uA(SDP) 40uA(CDP)	20uA(SDP) 40uA(CDP)
Package	8TDFN	8TDFN	8TDFN	8TDFN	8TDFN	8TDFN
Sample status	MP	MP	MP	MP	MP	MP

**SILEGO**

USB Host Charge ID family details-2

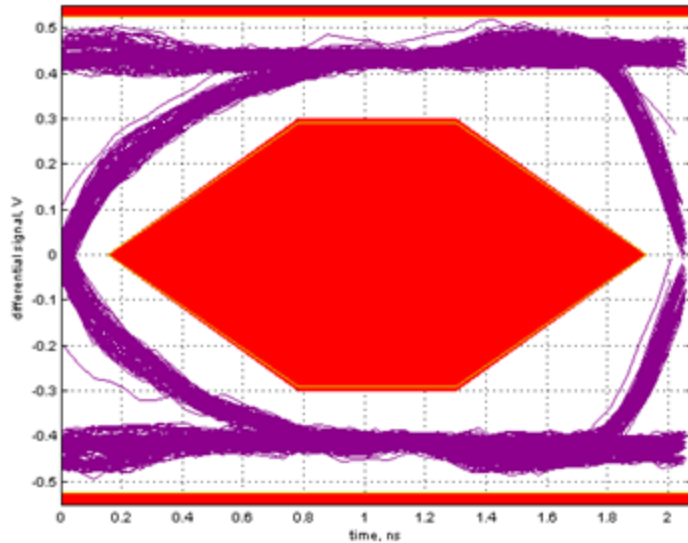
Part Name	SLG55566V	SLG55566AV	SLG55566BV	SLG55550V	SLG55550AV	SLG55567V
CEN# for P-FET	V					V
CEN for N-FET		V				
BC 1.1 support	V	V	V	V	V	V
BC 1.2 support	V	V	V	V	V	V
SDP in S0	V	V	V	V	V	V
CDP in S0						
Smart CDP-SDP						
DCP in S3/S4/S5	V	V	V	V	V	V
Apple compliant devices	V	V	V	V	V	V
Apple iPad2 high current charge						
Force dedicated charger mode			V	V	V	
EPLUG (Portable device plug-in/out detect)						V
USB Keyboard/Mouse wake up in S3						
RDP/RDM for external resistor divider				V	V	
Typ. Supply Current , VCB=VDD=5.5V (CB=1)	8uA	8uA	8uA	8uA	8uA	8uA
Package	8TDFN	8TDFN	8TDFN	10TDFN	10TDFN	10TDFN
Sample status	MP	MP	MP	MP	MP	ES & MP ready



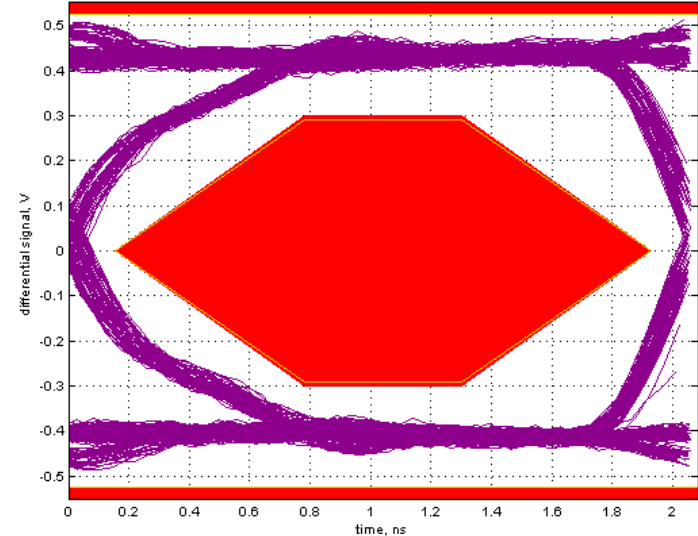
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USB Eye testing result

SLG5556X series Eye testing



SLG5558X series Eye testing





Application Note for wake up function

- System in S0 stage, CB=1, plug in mouse.
 - System in S0 stage, change CB=0, mouse still in the charge port
 - System from S0 to S3, CB=0, mouse still in the charge port
 - System in S3, CB=0, click mouse and system wake up to S0
- Keyboard /Mouse wake up test list

Vendor	Model name	Type
Dell	MOABBO	mouse
Dell	MO58UOA	mouse
Dell	SK-8115	keyboard
Dell	RT7D50	Keyboard
KME	IGC-IGM-3100(B)	mouse
Logitech	Mini wheel mouse M-BE55	mouse
Logitech	M-UAU94	mouse
Logitech	Compact Optical mouse 500	mouse
Logitech	Mouse M115	mouse
Microsoft	Wireless optical mouse 3000	mouse
Samsung	SEM-DT35US	keyboard
Samsung	SMO-3200B wireless	mouse



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Smart phone test list

Cell phone list	Type
Apple iPhone 3GS , 4GB	Smart Phone
Apple iPhone 4 , 16GB&32GB	Smart Phone
Apple iPhone 4S , 32GB	Smart Phone
Apple iPad1 , 16GB	PAD
Apple iPad2 , 32GB	PAD
Apple iPod shuffle 2G	MP3 Player
Apple iPod shuffle 3G	MP3 Player
Apple iPod shuffle 4G	MP3 Player
Apple iPod nano 3G , 8GB	MP3 Player
Apple iPod nano 4G , 8GB	MP3 Player
Apple iPod nano 6G , 8GB	MP3 Player
Apple iPod Touch 4G	MP4 Player
Asus P735	Smart Phone
BlackBerry Bold 9000	Smart Phone
BlackBerry Storm2 9520	Smart Phone
BlackBerry Tour 9630	Smart Phone
BlackBerry Bold 9700	Smart Phone
BlackBerry Curve 3G	Smart Phone
Gigabyte	Smart Phone
Garmin Asus A10	Smart Phone
HTC Dimand 2	Smart Phone
HTC Desire HD	Smart Phone
HTC Legend	Smart Phone
HTC Sensation Z710e	Smart Phone
HTC Sensation XE	Smart Phone

Cell phone list	Type
HTC Touch Cause	Smart Phone
HTC Thunderbolt	Smart Phone
LG Optimus One	Smart Phone
LG Incite	Smart Phone
LG	Cell Phone
Samsung Galaxy A	Smart Phone
Samsung Galaxy Note	Smart Phone
Samsung Galaxy S	Smart Phone
Samsung Galaxy S2	Smart Phone
Samsung Omnia 2 (GT-I8000H)	Smart Phone
Samsung Mirage	Smart Phone
Samsung S8500	Smart Phone
Samsung	Cell Phone
Sony Ericson Xperia Play	Smart Phone
Sony Ericson Xperia Arc S	Smart Phone
Sony Ericson Vivaz	Smart Phone
Motorola Atrix 4G	Smart Phone
Motorola Atrix ME860	Smart Phone
Motorola Droid Bionic	Smart Phone
Motorola Motoroi XT720	Smart Phone
Motorola XT502	Smart Phone
Motorola XT701	Smart Phone
Nokia N8	Smart Phone
Nokia E27	Smart Phone
Taiwan Mobile T2	Smart Phone

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