Freescale

MPC8313 Copper Wire Qualification (Freescale - KLM) - Electrical CZ

PCN 16326 **Cpk's <1.67 are 100% covered by the test program.**

AC CZ Data Summary

DDR1	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tddkhds		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhas		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhcs		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddklds		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tdiskewp		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tdiskewn		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhmh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhax		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhcx		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhdx		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkldx		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

DDR2	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tddkhds		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhas		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhcs		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddklds		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tdiskewp		>1.67	>1.67	>1.67	<1.67	>1.67	>1.67
tdiskewn		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhmh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhax		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhcx		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tddkhdx		<1.67	<1.67	<1.67	>1.67	>1.67	>1.67
tddkldx		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

AC CZ Data Summary

PCI	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tpcixkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tpcivkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tpckhov		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tpckhox		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

PCI	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tpcixkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tpcivkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tpckhov		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tpckhox		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

LBIU	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tlbixkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tlbivkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tlbkhov		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tlbkhox		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

LBIU	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tlbkhov		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tlbkhox		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

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AC CZ Data Summary

LBIU	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tlbkhov		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tlbkhox		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

USBULPI	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tusivkh	Temp	>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tusixkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tuskhov		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tuskhox		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

SPI	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tneivkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tneixkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tnekhox		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tniivkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tniixkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tnikhox		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

ETSEC_MANAGEMENT	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tmddvkh		>1.67	>1.67	>1.67	<1.67	<1.67	<1.67
tmddxkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tmdkhdx		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tmdkhdx_cyc		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

AC CZ Data Summary

ETSEC_MII	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tmrdvkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tmrdxkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tmtkhdv		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tmtkhdx		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

ETSEC_RMII	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tmrdvkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tmrdxkh		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tmtkhdv		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tmtkhdx		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67

ETSEC_RGMII	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tskrgt_su		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tskrgt_h		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tskrgt		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tskrgt_cyc		<1.67	<1.67	<1.67	<1.67	<1.67	<1.67

ETSEC_RGMII	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tskrgt_su		>1.67	<1.67	<1.67	<1.67	<1.67	<1.67
tskrgt		<1.67	<1.67	<1.67	<1.67	<1.67	<1.67
tskrgt_cyc		<1.67	<1.67	<1.67	<1.67	<1.67	<1.67

AC CZ Data Summary

ETSEC_RTBI	Cpk						
	Freq	333.33 MHz					
	IO/Vdd	0.94			1.06		
Parameter	Temp	110°C	25°C	-5°C	110°C	25°C	-5°C
tskrgt_su		<1.67	<1.67	<1.67	<1.67	<1.67	<1.67
tskrgt_h		>1.67	>1.67	>1.67	>1.67	>1.67	>1.67
tskrgt		<1.67	<1.67	<1.67	<1.67	<1.67	<1.67
tskrgt_cyc		<1.67	<1.67	<1.67	<1.67	<1.67	<1.67

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DCCZ GVDD Data Summary

DDR

DCCZ on input I/O LEVELS for GVDD (N5C)	
Parameter	Cpk
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67

DCCZ on output I/O LEVELS for GVDD (N5C)	
Parameter	Cpk
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67

DCCZ GVDD Data Summary

DDR

DCCZ on input I/O LEVELS for GVDD (25C)	
Parameter	Cpk
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67

DCCZ on output I/O LEVELS for GVDD (25C)	
Parameter	Cpk
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67

DCCZ GVDD Data Summary

DDR

DCCZ on input I/O LEVELS for GVDD (110C)	
Parameter	Cpk
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvil	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67
gvih	>1.67

DCCZ on output I/O LEVELS for GVDD (110C)	
Parameter	Cpk
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvol	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67
gvoh	>1.67

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DCCZ NVDD Data Summary

DCCZ	DCCZ on input I/O LEVELS for NVDD (N5C)	
DCCZ	Parameter	Cpk
PCI	opvil	>1.67
	opvil	>1.67
	opvil	>1.67
	opvih	>1.67
	opvih	>1.67
	opvih	>1.67
JTAG	ojvil	>1.67
	ojvil	>1.67
	ojvil	>1.67
	ojvih	>1.67
	ojvih	>1.67
	ojvih	>1.67
IPIC	oevil	>1.67
	oevil	>1.67
	oevil	>1.67
	oevih	>1.67
	oevih	>1.67
	oevih	>1.67
DUART	odvil	>1.67
	odvil	>1.67
	odvil	>1.67
	odvih	>1.67
	odvih	>1.67
	odvih	>1.67
I2C	oivil	>1.67
	oivil	>1.67
	oivil	>1.67
	oivih	>1.67
	oivih	>1.67
	oivih	>1.67

DCCZ NVDD Data Summary

DCCZ	DCCZ on input I/O LEVELS for NVDD (N5C)	
DCCZ	Parameter	Cpk
SPI	ospivil	>1.67
	ospivil	>1.67
	ospivil	>1.67
	ospivih	>1.67
	ospivih	>1.67
	ospivih	>1.67
USB	ousbvih	>1.67
	ousbvih	>1.67
	ousbvih	>1.67
	ousbvil	>1.67
	ousbvil	>1.67
	ousbvil	>1.67
CLOCK	clkvil	>1.67
	clkvil	>1.67
	clkvil	>1.67
	clkvih	>1.67
	clkvih	>1.67
	clkvih	>1.67
RESET INIT.	resetvil	>1.67
	resetvil	>1.67
	resetvil	>1.67
	resetvih	>1.67
	resetvih	>1.67
	resetvih	>1.67
PCI	opvol	>1.67
	opvol	>1.67
	opvol	>1.67
	opvoh	>1.67
	opvoh	>1.67
	opvoh	>1.67

DCCZ NVDD Data Summary

DCCZ	DCCZ on output I/O LEVELS for NVDD (N5C)	
DCCZ	Parameter	Cpk
JTAG	ojvol	>1.67
	ojvol	>1.67
	ojvol	>1.67
	ojvoh	>1.67
	ojvoh	>1.67
	ojvoh	>1.67
IPIC	oevol	>1.67
	oevol	>1.67
	oevol	>1.67
DUART	odvol	>1.67
	odvol	>1.67
	odvol	>1.67
	odvoh	>1.67
	odvoh	>1.67
	odvoh	>1.67
I2C	oivol	>1.67
	oivol	>1.67
	oivol	>1.67
RESET INIT.	resetvol	>1.67
	resetvol	>1.67
	resetvol	>1.67
	resetvoh	>1.67
	resetvoh	>1.67
	resetvoh	>1.67
SPI	ospivoh	>1.67
	ospivoh	>1.67
	ospivoh	>1.67
	ospivol	>1.67
	ospivol	>1.67
	ospivol	>1.67
USB	ousbvoh	>1.67
	ousbvoh	>1.67
	ousbvoh	>1.67
	ousbvol	>1.67
	ousbvol	>1.67
	ousbvol	>1.67

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DCCZ NVDD Data Summary

DCCZ	DCCZ on input I/O LEVELS for NVDD (25C)	
DCCZ	Parameter	Cpk
PCI	opvil	>1.67
	opvil	>1.67
	opvil	>1.67
	opvih	>1.67
	opvih	>1.67
	opvih	>1.67
JTAG	ojvil	>1.67
	ojvil	>1.67
	ojvil	>1.67
	ojvih	>1.67
	ojvih	>1.67
	ojvih	>1.67
IPIC	oevil	>1.67
	oevil	>1.67
	oevil	>1.67
	oevih	>1.67
	oevih	>1.67
	oevih	>1.67
DUART	odvil	>1.67
	odvil	>1.67
	odvil	>1.67
	odvih	>1.67
	odvih	>1.67
	odvih	>1.67
I2C	oivil	>1.67
	oivil	>1.67
	oivil	>1.67
	oivih	>1.67
	oivih	>1.67
	oivih	>1.67

DCCZ NVDD Data Summary

DCCZ	DCCZ on input I/O LEVELS for NVDD (25C)	
DCCZ	Parameter	Cpk
SPI	ospivil	>1.67
	ospivil	>1.67
	ospivil	>1.67
	ospivih	>1.67
	ospivih	>1.67
	ospivih	>1.67
USB	ousbvih	>1.67
	ousbvih	>1.67
	ousbvih	>1.67
	ousbvil	>1.67
	ousbvil	>1.67
	ousbvil	>1.67
CLOCK	clkvil	>1.67
	clkvil	>1.67
	clkvil	>1.67
	clkvih	>1.67
	clkvih	>1.67
	clkvih	>1.67
RESET INIT.	resetvil	>1.67
	resetvil	>1.67
	resetvil	>1.67
	resetvih	>1.67
	resetvih	>1.67
	resetvih	>1.67
PCI	opvol	>1.67
	opvol	>1.67
	opvol	>1.67
	opvoh	>1.67
	opvoh	>1.67
	opvoh	>1.67

DCCZ NVDD Data Summary

DCCZ	DCCZ on output I/O LEVELS for NVDD (25C)	
DCCZ	Parameter	Cpk
JTAG	ojvol	>1.67
	ojvol	>1.67
	ojvol	>1.67
	ojvoh	>1.67
	ojvoh	>1.67
	ojvoh	>1.67
IPIC	oevol	>1.67
	oevol	>1.67
	oevol	>1.67
DUART	odvol	>1.67
	odvol	>1.67
	odvol	>1.67
	odvoh	>1.67
	odvoh	>1.67
	odvoh	>1.67
I2C	oivol	>1.67
	oivol	>1.67
	oivol	>1.67
RESET INIT.	resetvol	>1.67
	resetvol	>1.67
	resetvol	>1.67
	resetvoh	>1.67
	resetvoh	>1.67
	resetvoh	>1.67
SPI	ospivoh	>1.67
	ospivoh	>1.67
	ospivoh	>1.67
	ospivol	>1.67
	ospivol	>1.67
	ospivol	>1.67
USB	ousbvoh	>1.67
	ousbvoh	>1.67
	ousbvoh	>1.67
	ousbvol	>1.67
	ousbvol	>1.67
	ousbvol	>1.67

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DCCZ NVDD Data Summary

DCCZ	DCCZ on input I/O LEVELS for NVDD (110C)	
DCCZ	Parameter	Cpk
PCI	opvil	>1.67
	opvil	>1.67
	opvil	>1.67
	opvih	>1.67
	opvih	>1.67
	opvih	>1.67
JTAG	ojvil	>1.67
	ojvil	>1.67
	ojvil	>1.67
	ojvih	>1.67
	ojvih	>1.67
	ojvih	>1.67
IPIC	oevil	>1.67
	oevil	>1.67
	oevil	>1.67
	oevih	>1.67
	oevih	>1.67
	oevih	>1.67
DUART	odvil	>1.67
	odvil	>1.67
	odvil	>1.67
	odvih	>1.67
	odvih	>1.67
	odvih	>1.67
I2C	oivil	>1.67
	oivil	>1.67
	oivil	>1.67
	oivih	>1.67
	oivih	>1.67
	oivih	>1.67

DCCZ NVDD Data Summary

DCCZ	DCCZ on input I/O LEVELS for NVDD (110C)	
DCCZ	Parameter	Cpk
SPI	ospivil	>1.67
	ospivil	>1.67
	ospivil	>1.67
	ospivih	>1.67
	ospivih	>1.67
	ospivih	>1.67
USB	ousbvih	>1.67
	ousbvih	>1.67
	ousbvih	>1.67
	ousbvil	>1.67
	ousbvil	>1.67
	ousbvil	>1.67
CLOCK	clkvil	>1.67
	clkvil	>1.67
	clkvil	>1.67
	clkvih	>1.67
	clkvih	>1.67
	clkvih	>1.67
RESET INIT.	resetvil	>1.67
	resetvil	>1.67
	resetvil	>1.67
	resetvih	>1.67
	resetvih	>1.67
	resetvih	>1.67
PCI	opvol	>1.67
	opvol	>1.67
	opvol	>1.67
	opvoh	>1.67
	opvoh	>1.67
	opvoh	>1.67

DCCZ NVDD Data Summary

DCCZ	DCCZ on output I/O LEVELS for NVDD (110C)	
DCCZ	Parameter	Cpk
JTAG	ojvol	>1.67
	ojvol	>1.67
	ojvol	>1.67
	ojvoh	>1.67
	ojvoh	>1.67
	ojvoh	>1.67
IPIC	oevol	>1.67
	oevol	>1.67
	oevol	>1.67
DUART	odvol	>1.67
	odvol	>1.67
	odvol	>1.67
	odvoh	>1.67
	odvoh	>1.67
	odvoh	>1.67
I2C	oivol	>1.67
	oivol	>1.67
	oivol	>1.67
RESET INIT.	resetvol	>1.67
	resetvol	>1.67
	resetvol	>1.67
	resetvoh	>1.67
	resetvoh	>1.67
	resetvoh	>1.67
SPI	ospivoh	>1.67
	ospivoh	>1.67
	ospivoh	>1.67
	ospivol	>1.67
	ospivol	>1.67
	ospivol	>1.67
USB	ousbvoh	>1.67
	ousbvoh	>1.67
	ousbvoh	>1.67
	ousbvol	>1.67
	ousbvol	>1.67
	ousbvol	>1.67

Freescale

MPC8313 Copper Wire Qualification (Freescale - KLM) - Electrical CZ

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DCCZ LVDD Data Summary

DCCZ	DCCZ on input I/O LEVELS for LVDD (N5C)	
DCCZ	Parameter	Cpk
eLBC	olvil	>1.67
	olvil	>1.67
	olvil	>1.67
	olvih	>1.67
	olvih	>1.67
	olvih	>1.67
eTSEC	otsecvih	>1.67
	otsecvih	>1.67
	otsecvih	>1.67
	otsecvil	>1.67
	otsecvil	>1.67
	otsecvil	>1.67
DCCZ	DCCZ on output I/O LEVELS for LVDD (N5C)	
DCCZ	Parameter	Cpk
eLBC	olvol	>1.67
	olvol	>1.67
	olvol	>1.67
	olvoh	>1.67
	olvoh	>1.67
	olvoh	>1.67
eTSEC	otsecvoh	>1.67
	otsecvoh	>1.67
	otsecvoh	>1.67
	otsecvol	>1.67
	otsecvol	>1.67
	otsecvol	>1.67

DCCZ LVDD Data Summary

DCCZ	DCCZ on input I/O LEVELS for LVDD (25C)	
DCCZ	Parameter	Cpk
eLBC	olvil	>1.67
	olvil	>1.67
	olvil	>1.67
	olvih	>1.67
	olvih	>1.67
	olvih	>1.67
eTSEC	otsecvih	>1.67
	otsecvih	>1.67
	otsecvih	>1.67
	otsecvil	>1.67
	otsecvil	>1.67
	otsecvil	>1.67
DCCZ	DCCZ on output I/O LEVELS for LVDD (25C)	
DCCZ	Parameter	Cpk
eLBC	olvol	>1.67
	olvol	>1.67
	olvol	>1.67
	olvoh	>1.67
	olvoh	>1.67
	olvoh	>1.67
eTSEC	otsecvoh	>1.67
	otsecvoh	>1.67
	otsecvoh	>1.67
	otsecvol	>1.67
	otsecvol	>1.67
	otsecvol	>1.67

DCCZ LVDD Data Summary

DCCZ	DCCZ on input I/O LEVELS for LVDD (110C)	
DCCZ	Parameter	Cpk
eLBC	olvil	>1.67
	olvil	>1.67
	olvil	>1.67
	olvih	>1.67
	olvih	>1.67
	olvih	>1.67
eTSEC	otsecvih	>1.67
	otsecvih	>1.67
	otsecvih	>1.67
	otsecvil	>1.67
	otsecvil	>1.67
	otsecvil	>1.67
DCCZ	DCCZ on output I/O LEVELS for LVDD (110C)	
DCCZ	Parameter	Cpk
eLBC	olvol	>1.67
	olvol	>1.67
	olvol	>1.67
	olvoh	>1.67
	olvoh	>1.67
	olvoh	>1.67
eTSEC	otsecvoh	>1.67
	otsecvoh	>1.67
	otsecvoh	>1.67
	otsecvol	>1.67
	otsecvol	>1.67
	otsecvol	>1.67