

**Freescale PCN 16403**

**MPC8347/9 TBGA Pd-Cu Wire Bond Qualification**

**Electrical Characterization (HOT)**

**Note: Cpk's < 1.67 are 100% covered by the test program.**

HOT 105°C		Gold Wire Bond (Control Group)	Pd-Cu Wire Bond Qualification
CZ Block	Spec	Cpk	Cpk
OVDD DC Input Levels	olvil:	> 1.67	> 1.67
	olvih:	> 1.67	> 1.67
	ojvil:	> 1.67	> 1.67
	ojvih:	> 1.67	> 1.67
	oivil:	> 1.67	> 1.67
	oivih:	> 1.67	> 1.67
	opvil:	> 1.67	> 1.67
	opvih:	> 1.67	> 1.67
	odvil:	> 1.67	> 1.67
	odvih:	> 1.67	> 1.67
	ogpvil:	> 1.67	> 1.67
	ogpvih:	> 1.67	> 1.67
	olvol:	> 1.67	> 1.67
	olvoh:	> 1.67	> 1.67
OVDD DC output Levels	ojvol:	> 1.67	> 1.67
	ojvoh:	> 1.67	> 1.67
	oivol:	> 1.67	> 1.67
	oivoh:	> 1.67	> 1.67
	opvol:	> 1.67	> 1.67
	opvoh:	> 1.67	> 1.67
	odvol:	> 1.67	> 1.67
	odvoh:	> 1.67	> 1.67
	ogpvol:	> 1.67	> 1.67
	ogpvoh:	> 1.67	> 1.67
	lvil_1:	> 1.67	> 1.67
	lvih_1:	> 1.67	> 1.67
	lvil_2:	> 1.67	> 1.67
	lvih_2:	> 1.67	> 1.67
LVDD (3.3V) DC Input Levels	lvil:	> 1.67	> 1.67
	lvih:	> 1.67	> 1.67

105°C		Gold Wire Bond (Control Group)	Pd-Cu Wire Bond Qualification
CZ Block	Spec	Cpk	Cpk
LVDD (3.3V) DC Output Levels	lvol_1:	> 1.67	> 1.67
	lvoh_1:	> 1.67	> 1.67
	lvol_2:	> 1.67	> 1.67
	lvoh_2:	> 1.67	> 1.67
	lvol:	> 1.67	> 1.67
	lvoh:	> 1.67	> 1.67
	gvil:	> 1.67	> 1.67
	gvih:	> 1.67	> 1.67
	gvol:	> 1.67	> 1.67
	gvoh:	> 1.67	> 1.67
GVDD(2.5V) Input Levels	lvil_1:	> 1.67	> 1.67
	lvih_1:	> 1.67	> 1.67
	lvil_2:	> 1.67	> 1.67
	lvih_2:	> 1.67	> 1.67
	lvil:	> 1.67	> 1.67
LVDD (2.5V) DC Input Levels	lvil:	> 1.67	> 1.67
	lvih:	> 1.67	> 1.67
	lvol_1:	> 1.67	> 1.67
	lvoh_1:	> 1.67	> 1.67
	lvol_2:	> 1.67	> 1.67
LVDD (2.5V) DC Output Levels	lvoh_2:	> 1.67	> 1.67
	lvol:	> 1.67	> 1.67
	lvoh:	> 1.67	> 1.67
	gvil:	> 1.67	> 1.67
	gvih:	> 1.67	> 1.67
GVDD(1.8V) Input Levels	gvol:	> 1.67	> 1.67
	gvoh:	> 1.67	> 1.67
GVDD(1.8V) Output Levels	gvil:	> 1.67	> 1.67
	gvih:	> 1.67	> 1.67

**Freescale PCN 16403**

**MPC8347/9 TBGA Pd-Cu Wire Bond Qualification**

**Electrical Characterization (COLD)**

**Note: Cpk's < 1.67 are 100% covered by the test program.**

COLD -40°C		Gold Wire Bond (Control Group)	Pd-Cu Wire Bond Qualification
CZ Block	Spec	Cpk	Cpk
OVDD DC Input Levels	olvil:	> 1.67	> 1.67
	olvih:	> 1.67	> 1.67
	ojvil:	> 1.67	> 1.67
	ojvih:	> 1.67	> 1.67
	oivil:	> 1.67	> 1.67
	oivih:	> 1.67	> 1.67
	opvil:	> 1.67	> 1.67
	opvih:	> 1.67	> 1.67
	odvil:	> 1.67	> 1.67
	odvih:	> 1.67	> 1.67
	ogpvil:	> 1.67	> 1.67
	ogpvih:	> 1.67	> 1.67
	olvol:	> 1.67	> 1.67
	olvoh:	> 1.67	> 1.67
OVDD DC output Levels	ojvol:	> 1.67	> 1.67
	ojvoh:	> 1.67	> 1.67
	oivol:	> 1.67	> 1.67
	oivoh:	> 1.67	> 1.67
	opvol:	> 1.67	> 1.67
	opvoh:	> 1.67	> 1.67
	odvol:	> 1.67	> 1.67
	odvoh:	> 1.67	> 1.67
	ogpvol:	> 1.67	> 1.67
	ogpvoh:	> 1.67	> 1.67
	lvil_1:	> 1.67	> 1.67
	lvih_1:	> 1.67	> 1.67
	lvil_2:	> 1.67	> 1.67
	lvih_2:	> 1.67	> 1.67
LVDD (3.3V) DC Input Levels	lvil:	> 1.67	> 1.67
	lvih:	> 1.67	> 1.67

COLD -40°C		Gold Wire Bond (Control Group)	Pd-Cu Wire Bond Qualification
CZ Block	Spec	Cpk	Cpk
LVDD (3.3V) DC Output Levels	lvol_1:	> 1.67	> 1.67
	lvoh_1:	> 1.67	> 1.67
	lvol_2:	> 1.67	> 1.67
	lvoh_2:	> 1.67	> 1.67
	lvol:	> 1.67	> 1.67
	lvoh:	> 1.67	> 1.67
	gvil:	> 1.67	> 1.67
	gvih:	> 1.67	> 1.67
	gvol:	< 1.67	< 1.67
	gvoth:	> 1.67	> 1.67
	lvil_1:	> 1.67	> 1.67
	lvih_1:	> 1.67	> 1.67
	lvil_2:	> 1.67	> 1.67
	lvih_2:	> 1.67	> 1.67
GVDD(2.5V) Input Levels	lvil:	> 1.67	> 1.67
	lvih:	> 1.67	> 1.67
	lvol_1:	> 1.67	> 1.67
	lvoh_1:	> 1.67	> 1.67
	lvol_2:	> 1.67	> 1.67
	lvoh_2:	> 1.67	> 1.67
	lvol:	> 1.67	> 1.67
	lvoh:	> 1.67	> 1.67
	gvil:	> 1.67	> 1.67
	gvih:	> 1.67	> 1.67
	gvol:	< 1.67	> 1.67
	gvoth:	> 1.67	> 1.67
	lvil_1:	> 1.67	> 1.67
	lvih_1:	> 1.67	> 1.67
GVDD(2.5V) Output Levels	lvil_2:	> 1.67	> 1.67
	lvih_2:	> 1.67	> 1.67
	lvol_1:	> 1.67	> 1.67
	lvoh_1:	> 1.67	> 1.67
	lvol_2:	> 1.67	> 1.67
	lvoh_2:	> 1.67	> 1.67
	lvol:	> 1.67	> 1.67
	lvoh:	> 1.67	> 1.67
	gvil:	> 1.67	> 1.67
	gvih:	> 1.67	> 1.67
	gvol:	< 1.67	> 1.67
	gvoth:	> 1.67	> 1.67
	lvil_1:	> 1.67	> 1.67
	lvih_1:	> 1.67	> 1.67