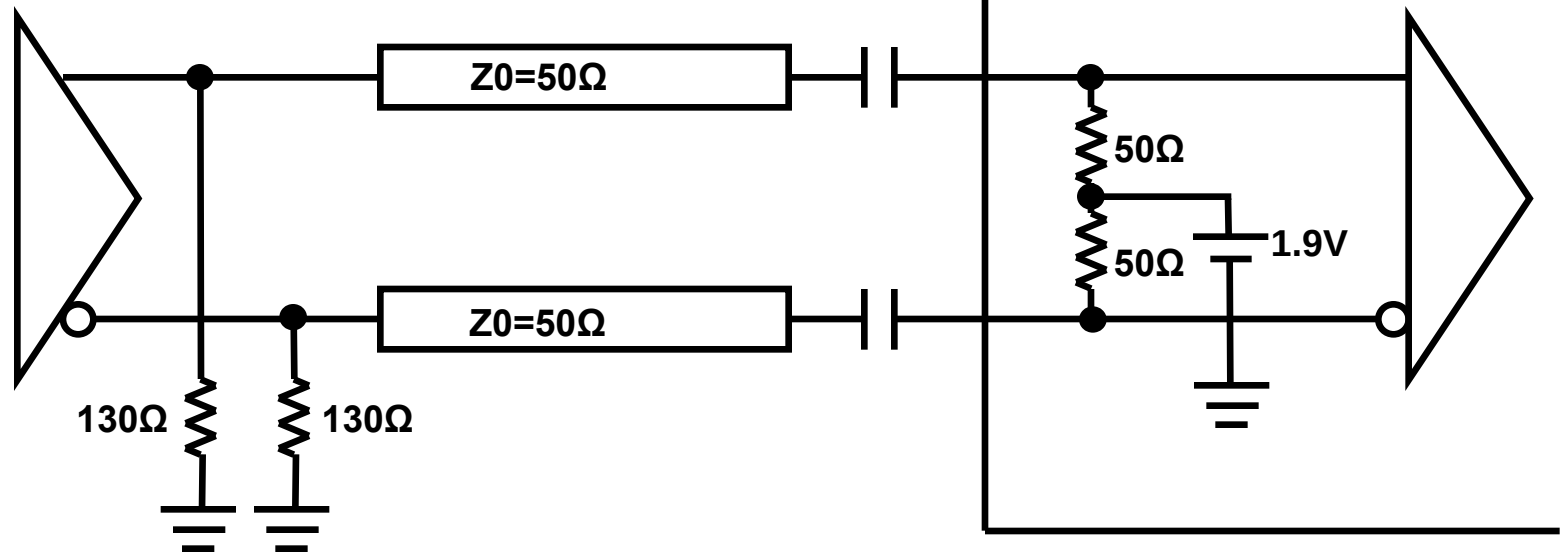


① LVPECL/AC-coupling/Internal Termination

PRE_REF & SEC_REF Input Buffer Settings

Settings						Configuration				
0.0	0.1	1.0	1.1	1.2	1.3/4	Hyst	Mode	Coup	Term	Vbb
0	0	X	1	X	X	ON	LVC MOS	DC	N/A	--
1	0	0	1	0	0	ON	LVPECL	AC	Internal	1.9V
1	0	1	1	0	0	ON	LVPECL	DC	Internal	1.2V
1	0	X	1	1	X	ON	LVPECL	--	External	--
1	1	0	1	0	0	ON	LVDS	AC	Internal	1.2V
1	1	1	1	0	0	ON	LVDS	DC	Internal	1.2V
1	1	X	1	1	X	ON	LVDS	--	External	--
X	X	X	0	X	X	OFF	--	--	--	--
X	X	X	1	X	X	ON	--	--	--	--

LVPECL Driver

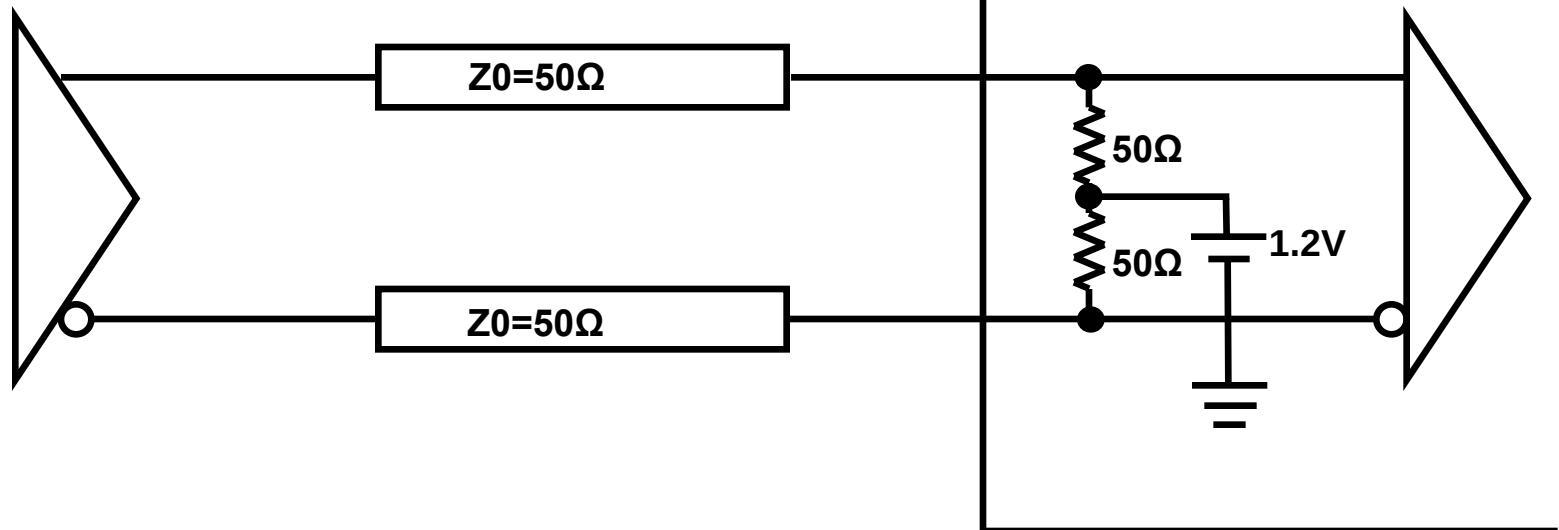


② LVPECL/DC-coupling/Internal Termination

PRE_REF & SEC_REF Input Buffer Settings

Settings						Configuration				
0.0	0.1	1.0	1.1	1.2	1.3/4	Hyst	Mode	Coup	Term	Vbb
0	0	X	1	X	X	ON	LVC MOS	DC	N/A	--
1	0	0	1	0	0	ON	LVPECL	AC	Internal	1.9V
1	0	1	1	0	0	ON	LVPECL	DC	Internal	1.2V
1	0	X	1	1	X	ON	LVPECL	--	External	--
1	1	0	1	0	0	ON	LVDS	AC	Internal	1.2V
1	1	1	1	0	0	ON	LVDS	DC	Internal	1.2V
1	1	X	1	1	X	ON	LVDS	--	External	--
X	X	X	0	X	X	OFF	--	--	--	--
X	X	X	1	X	X	ON	--	--	--	--

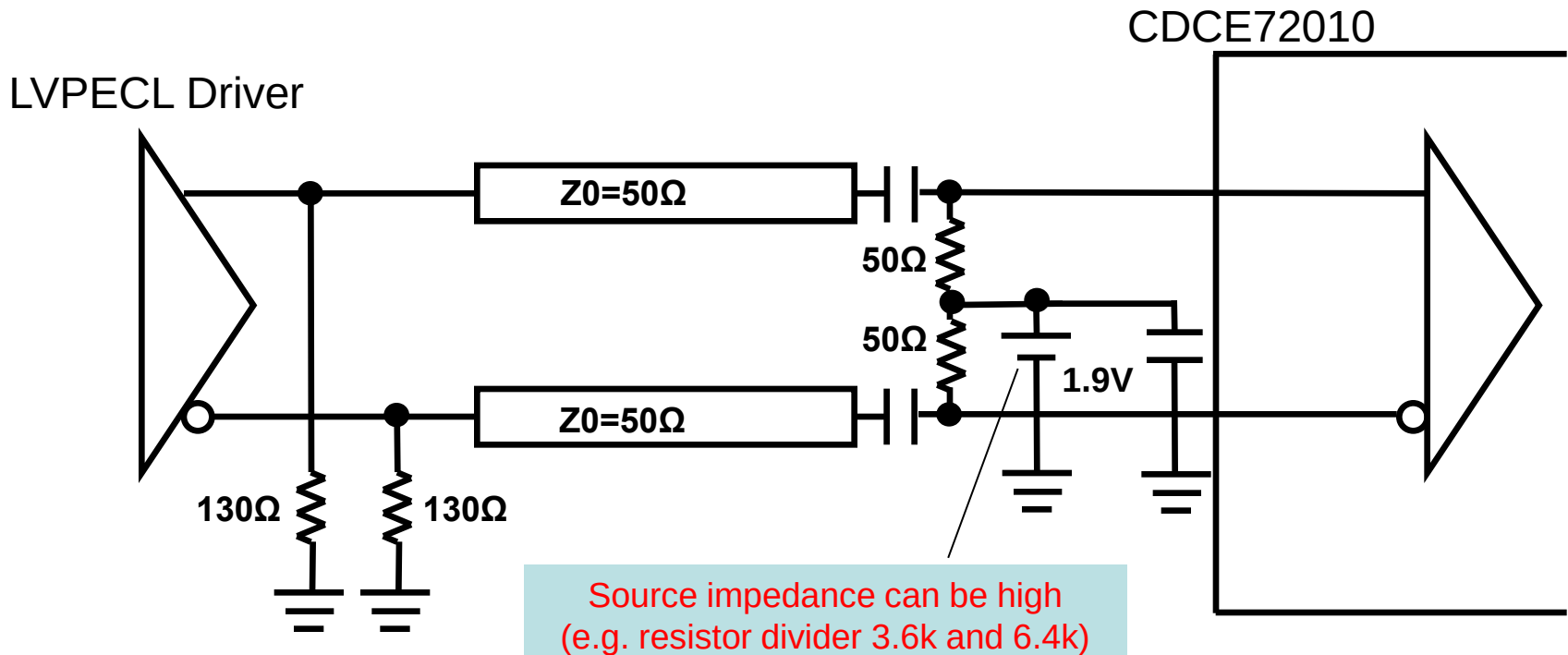
LVPECL Driver



③-1 LVPECL/AC-coupling/External Termination

PRE_REF & SEC_REF Input Buffer Settings

Settings						Configuration				
0.0	0.1	1.0	1.1	1.2	1.3/4	Hyst	Mode	Coup	Term	Vbb
0	0	X	1	X	X	ON	LVC MOS	DC	N/A	--
1	0	0	1	0	0	ON	LVPECL	AC	Internal	1.9V
1	0	1	1	0	0	ON	LVPECL	DC	Internal	1.2V
1	0	X	1	1	X	ON	LVPECL	--	External	--
1	1	0	1	0	0	ON	LVDS	AC	Internal	1.2V
1	1	1	1	0	0	ON	LVDS	DC	Internal	1.2V
1	1	X	1	1	X	ON	LVDS	--	External	--
X	X	X	0	X	X	OFF	--	--	--	--
X	X	X	1	X	X	ON	--	--	--	--

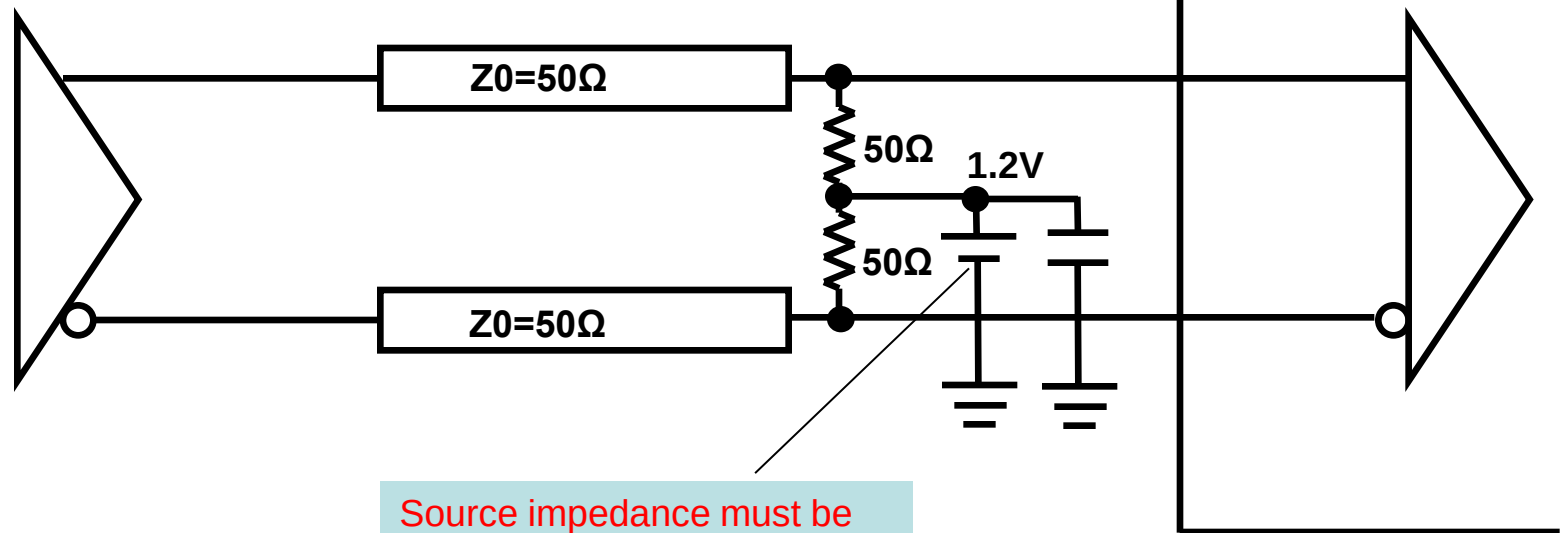


③-2 LVPECL/DC-coupling/External Termination

PRE_REF & SEC_REF Input Buffer Settings

Settings						Configuration				
0.0	0.1	1.0	1.1	1.2	1.3/4	Hyst	Mode	Coup	Term	Vbb
0	0	X	1	X	X	ON	LVC MOS	DC	N/A	--
1	0	0	1	0	0	ON	LVPECL	AC	Internal	1.9V
1	0	1	1	0	0	ON	LVPECL	DC	Internal	1.2V
1	0	X	1	1	X	ON	LVPECL	--	External	--
1	1	0	1	0	0	ON	LVDS	AC	Internal	1.2V
1	1	1	1	0	0	ON	LVDS	DC	Internal	1.2V
1	1	X	1	1	X	ON	LVDS	--	External	--
X	X	X	0	X	X	OFF	--	--	--	--
X	X	X	1	X	X	ON	--	--	--	--

LVPECL Driver



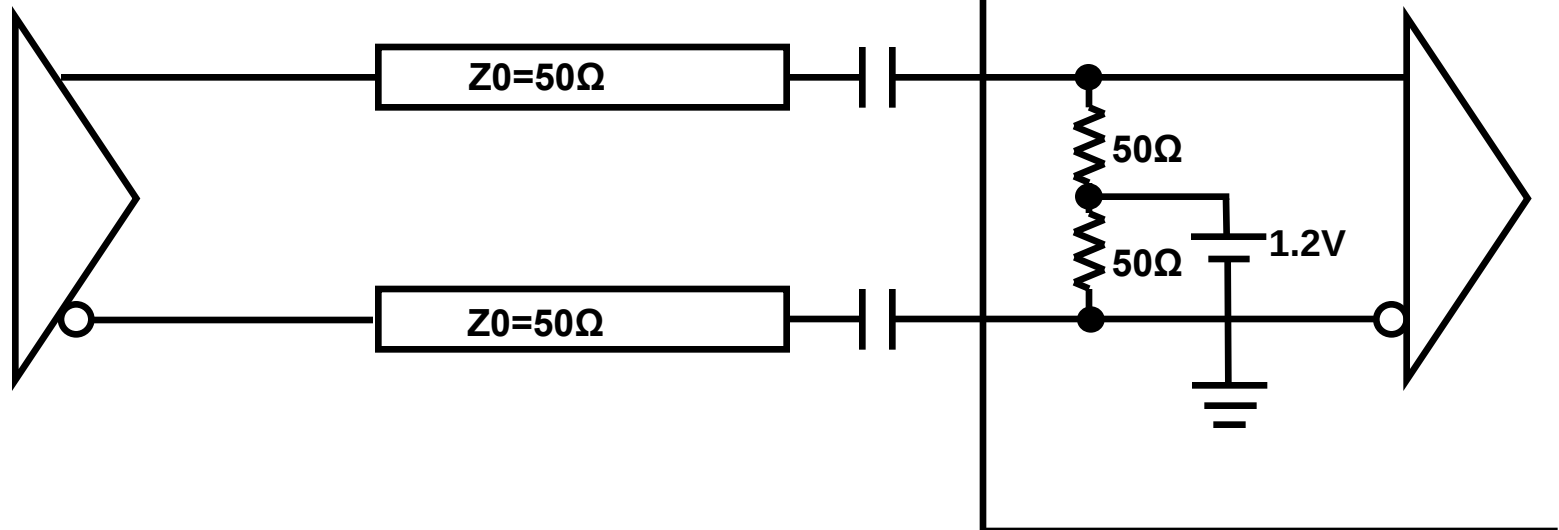
Source impedance must be very low (e.g. a few Ohm)

④ LVDS/AC-coupling/Internal Termination

PRE_REF & SEC_REF Input Buffer Settings

Settings						Configuration				
0.0	0.1	1.0	1.1	1.2	1.3/4	Hyst	Mode	Coup	Term	Vbb
0	0	X	1	X	X	ON	LVC MOS	DC	N/A	--
1	0	0	1	0	0	ON	LVPECL	AC	Internal	1.9V
1	0	1	1	0	0	ON	LVPECL	DC	Internal	1.2V
1	0	X	1	1	X	ON	LVPECL	--	External	--
1	1	0	1	0	0	ON	LVDS	AC	Internal	1.2V
1	1	1	1	0	0	ON	LVDS	DC	Internal	1.2V
1	1	X	1	1	X	ON	LVDS	--	External	--
X	X	X	0	X	X	OFF	--	--	--	--
X	X	X	1	X	X	ON	--	--	--	--

LVDS Driver

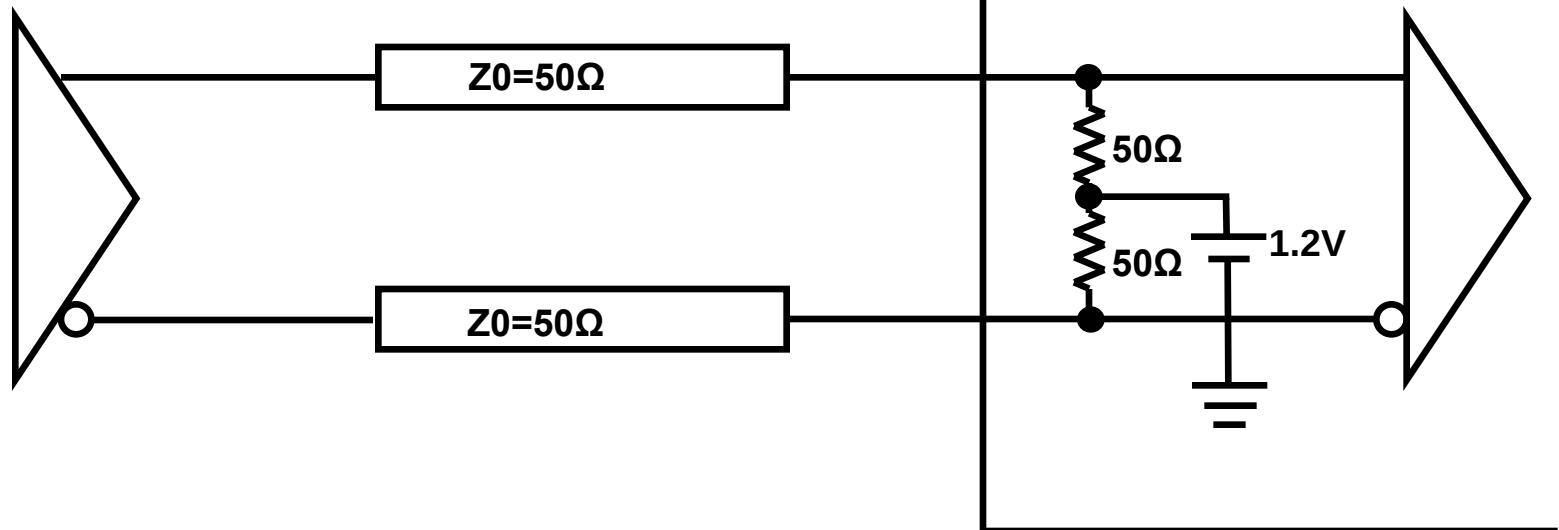


⑤ LVDS/DC-coupling/Internal Termination

PRE_REF & SEC_REF Input Buffer Settings

Settings						Configuration				
0.0	0.1	1.0	1.1	1.2	1.3/4	Hyst	Mode	Coup	Term	Vbb
0	0	X	1	X	X	ON	LVC MOS	DC	N/A	--
1	0	0	1	0	0	ON	LVPECL	AC	Internal	1.9V
1	0	1	1	0	0	ON	LVPECL	DC	Internal	1.2V
1	0	X	1	1	X	ON	LVPECL	--	External	--
1	1	0	1	0	0	ON	LVDS	AC	Internal	1.2V
1	1	1	1	0	0	ON	LVDS	DC	Internal	1.2V
1	1	X	1	1	X	ON	LVDS	--	External	--
X	X	X	0	X	X	OFF	--	--	--	--
X	X	X	1	X	X	ON	--	--	--	--

LVDS Driver

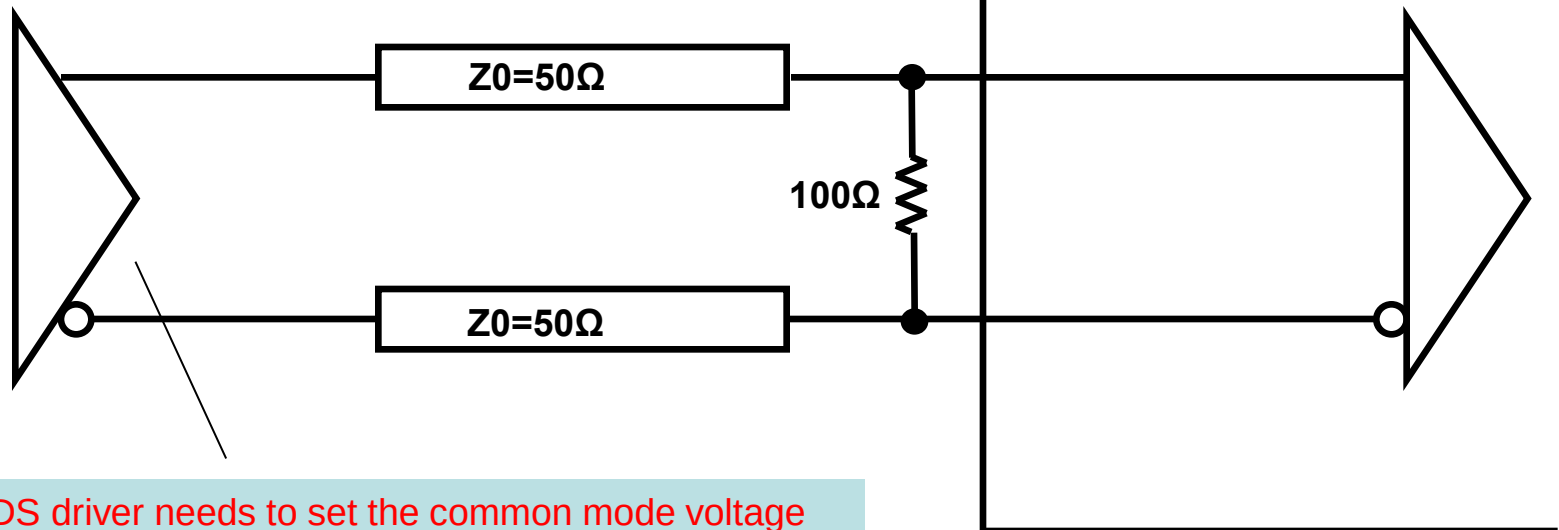


⑥-1 LVDS/DC-coupling/External Termination

PRE_REF & SEC_REF Input Buffer Settings

Settings						Configuration				
0.0	0.1	1.0	1.1	1.2	1.3/4	Hyst	Mode	Coup	Term	Vbb
0	0	X	1	X	X	ON	LVC MOS	DC	N/A	--
1	0	0	1	0	0	ON	LVPECL	AC	Internal	1.9V
1	0	1	1	0	0	ON	LVPECL	DC	Internal	1.2V
1	0	X	1	1	X	ON	LVPECL	--	External	--
1	1	0	1	0	0	ON	LVDS	AC	Internal	1.2V
1	1	1	1	0	0	ON	LVDS	DC	Internal	1.2V
1	1	X	1	1	X	ON	LVDS	--	External	--
X	X	X	0	X	X	OFF	--	--	--	--
X	X	X	1	X	X	ON	--	--	--	--

LVDS Driver



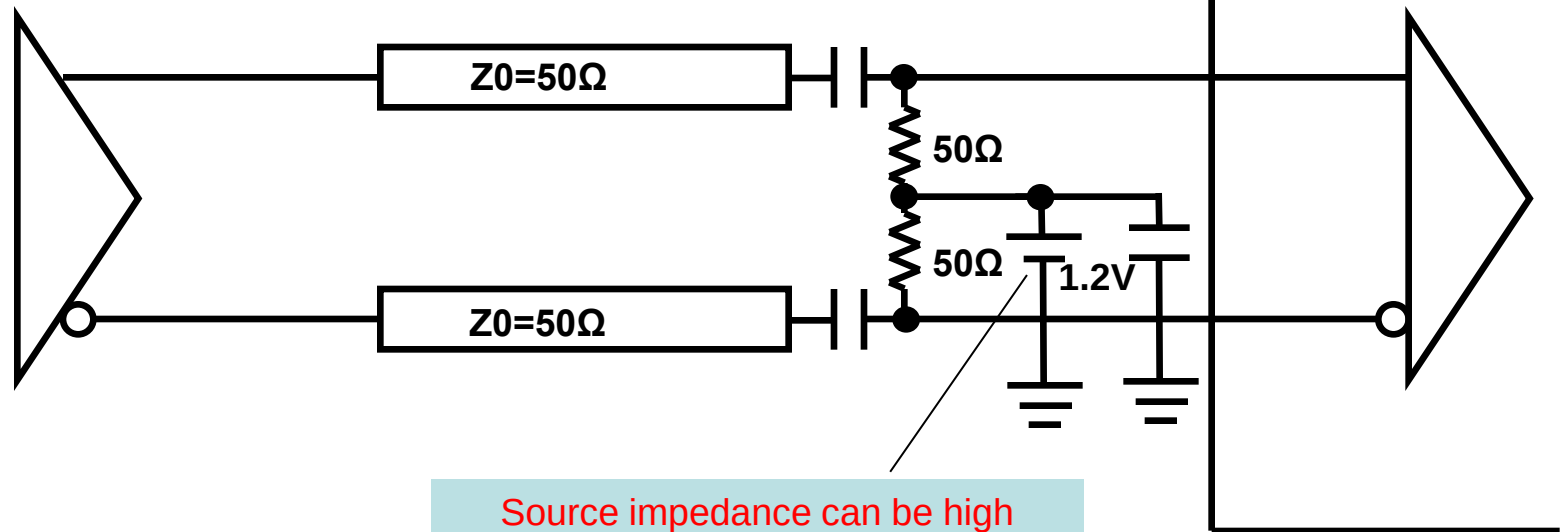
The LVDS driver needs to set the common mode voltage of ~1.2V (see TIA/EAI-644 LVDS spec)

⑥-2 LVDS/AC-coupling/External Termination

PRE_REF & SEC_REF Input Buffer Settings

Settings						Configuration				
0.0	0.1	1.0	1.1	1.2	1.3/4	Hyst	Mode	Coup	Term	Vbb
0	0	X	1	X	X	ON	LVC MOS	DC	N/A	--
1	0	0	1	0	0	ON	LVPECL	AC	Internal	1.9V
1	0	1	1	0	0	ON	LVPECL	DC	Internal	1.2V
1	0	X	1	1	X	ON	LVPECL	--	External	--
1	1	0	1	0	0	ON	LVDS	AC	Internal	1.2V
1	1	1	1	0	0	ON	LVDS	DC	Internal	1.2V
1	1	X	1	1	X	ON	LVDS	--	External	--
X	X	X	0	X	X	OFF	--	--	--	--
X	X	X	1	X	X	ON	--	--	--	--

LVDS Driver



Source impedance can be high
(e.g. resistor divider $3.6k$ and $6.4k$)