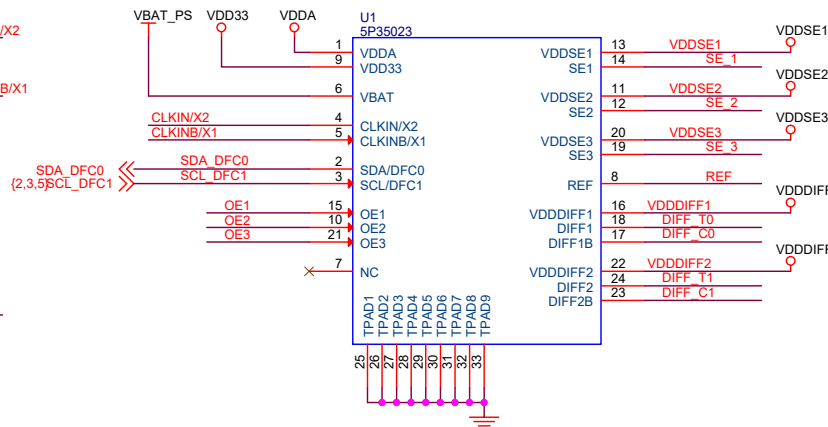
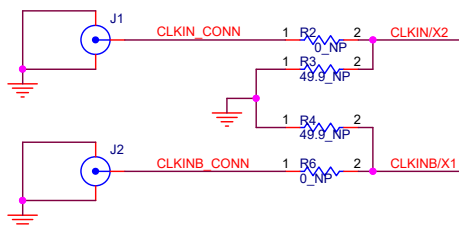
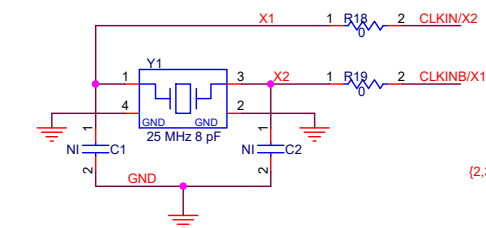
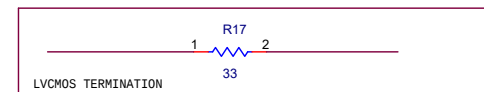
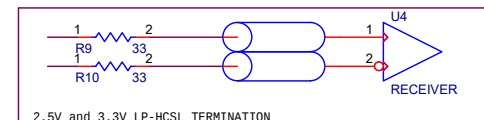
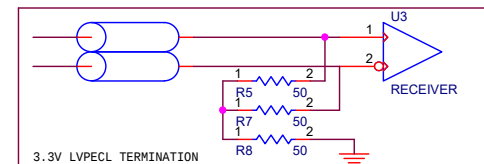
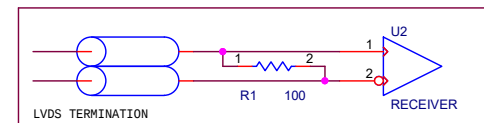


Locate near
DUT power pin

NOTE:FERRITE BEAD FB1 =

Manufacture	Part Number	Z@100MHz	PkgSz	DC res.	Current(Ma)
Fair-Rite	2504021217Y0	120	0402	0.5	200
muRata	BLM18AG601SN10	600	0603	0.38	500
muRata	BLM158B121SN1	120	0402	0.35	300
TDK	NM2109S241A	240	0402	0.18	200
TECSTAR	TB4532153121	120	0402	0.3	300

Revision history
0.1 02/24/16 first publication
0.2 08/12/25 update FB info



Layout notes.

1. Separate Xout and Xin traces by at least 3 x the trace width.
2. Do not share crystal load capacitor ground via with other components.
3. Route power from bead through bulk capacitor pad then through 0.1uF capacitor pad then to clock chip Vdd pad.
4. Do not share ground vias. One ground pin one ground via.
5. Exposed pad should be grounded but is not required.

RENESAS

Size	Document Number	Rev
B	5P35023_Reference Schematic	1.0
Date:	Tuesday, October 08, 2019	Sheet 1 of 1