

The figure displays 16 schematic diagrams of the ADALU1787_Bb_Ext component, arranged in a 4x4 grid. Each diagram is labeled with a number (1 to 16) and shows a detailed internal circuit with various pins and components. The components are identical in structure but differ in their pin configurations and internal circuitry, as indicated by the different pin numbers and labels (e.g., SDA0, SDA1, SDA2, SDA3, SDA4, SDA5, SDA6, SDA7, SDA8, SDA9, SDA10, SDA11, SDA12, SDA13, SDA14, SDA15, SDA16, SDA17, SDA18, SDA19, SDA20, SDA21, SDA22, SDA23, SDA24, SDA25, SDA26, SDA27, SDA28, SDA29, SDA30, SDA31, SDA32, SDA33, SDA34, SDA35, SDA36, SDA37, SDA38, SDA39, SDA40, SDA41, SDA42, SDA43, SDA44, SDA45, SDA46, SDA47, SDA48, SDA49, SDA50, SDA51, SDA52, SDA53, SDA54, SDA55, SDA56, SDA57, SDA58, SDA59, SDA60, SDA61, SDA62, SDA63, SDA64, SDA65, SDA66, SDA67, SDA68, SDA69, SDA70, SDA71, SDA72, SDA73, SDA74, SDA75, SDA76, SDA77, SDA78, SDA79, SDA80, SDA81, SDA82, SDA83, SDA84, SDA85, SDA86, SDA87, SDA88, SDA89, SDA90, SDA91, SDA92, SDA93, SDA94, SDA95, SDA96, SDA97, SDA98, SDA99, SDA100, SDA101, SDA102, SDA103, SDA104, SDA105, SDA106, SDA107, SDA108, SDA109, SDA110, SDA111, SDA112, SDA113, SDA114, SDA115, SDA116, SDA117, SDA118, SDA119, SDA120, SDA121, SDA122, SDA123, SDA124, SDA125, SDA126, SDA127, SDA128, SDA129, SDA130, SDA131, SDA132, SDA133, SDA134, SDA135, SDA136, SDA137, SDA138, SDA139, SDA140, SDA141, SDA142, SDA143, SDA144, SDA145, SDA146, SDA147, SDA148, SDA149, SDA150, SDA151, SDA152, SDA153, SDA154, SDA155, SDA156, SDA157, SDA158, SDA159, SDA160, SDA161, SDA162, SDA163, SDA164, SDA165, SDA166, SDA167, SDA168, SDA169, SDA170, SDA171, SDA172, SDA173, SDA174, SDA175, SDA176, SDA177, SDA178, SDA179, SDA180, SDA181, SDA182, SDA183, SDA184, SDA185, SDA186, SDA187, SDA188, SDA189, SDA190, SDA191, SDA192, SDA193, SDA194, SDA195, SDA196, SDA197, SDA198, SDA199, SDA200, SDA201, SDA202, SDA203, SDA204, SDA205, SDA206, SDA207, SDA208, SDA209, SDA210, SDA211, SDA212, SDA213, SDA214, SDA215, SDA216, SDA217, SDA218, SDA219, SDA220, SDA221, SDA222, SDA223, SDA224, SDA225, SDA226, SDA227, SDA228, SDA229, SDA230, SDA231, SDA232, SDA233, SDA234, SDA235, SDA236, SDA237, SDA238, SDA239, SDA240, SDA241, SDA242, SDA243, SDA244, SDA245, SDA246, SDA247, SDA248, SDA249, SDA250, SDA251, SDA252, SDA253, SDA254, SDA255, SDA256, SDA257, SDA258, SDA259, SDA260, SDA261, SDA262, SDA263, SDA264, SDA265, SDA266, SDA267, SDA268, SDA269, SDA270, SDA271, SDA272, SDA273, SDA274, SDA275, SDA276, SDA277, SDA278, SDA279, SDA280, SDA281, SDA282, SDA283, SDA284, SDA285, SDA286, SDA287, SDA288, SDA289, SDA290, SDA291, SDA292, SDA293, SDA294, SDA295, SDA296, SDA297, SDA298, SDA299, SDA300, SDA301, SDA302, SDA303, SDA304, SDA305, SDA306, SDA307, SDA308, SDA309, SDA310, SDA311, SDA312, SDA313, SDA314, SDA315, SDA316, SDA317, SDA318, SDA319, SDA320, SDA321, SDA322, SDA323, SDA324, SDA325, SDA326, SDA327, SDA328, SDA329, SDA330, SDA331, SDA332, SDA333, SDA334, SDA335, SDA336, SDA337, SDA338, SDA339, SDA340, SDA341, SDA342, SDA343, SDA344, SDA345, SDA346, SDA347, SDA348, SDA349, SDA350, SDA351, SDA352, SDA353, SDA354, SDA355, SDA356, SDA357, SDA358, SDA359, SDA360, SDA361, SDA362, SDA363, SDA364, SDA365, SDA366, SDA367, 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SDA618, SDA619, SDA620, SDA621, SDA622, SDA623, SDA624, SDA625, SDA626, SDA627, SDA628, SDA629, SDA630, SDA631, SDA632, SDA633, SDA634, SDA635, SDA636, SDA637, SDA638, SDA639, SDA640, SDA641, SDA642, SDA643, SDA644, SDA645, SDA646, SDA647, SDA648, SDA649, SDA650, SDA651, SDA652, SDA653, SDA654, SDA655, SDA656, SDA657, SDA658, SDA659, SDA660, SDA661, SDA662, SDA663, SDA664, SDA665, SDA666, SDA667, SDA668, SDA669, SDA670, SDA671, SDA672, SDA673, SDA674, SDA675, SDA676, SDA677, SDA678

Next value:
 $lled = lret * (900\text{mV} / \text{Rext}) * (1/4)$
 We want $lled$ max = 20mA for $lret = 0\text{xff}(255)$
 So $\text{Rext} = 3.3\text{k}$ (rounded value)

Conn_D2xD5_Counter_Clockwise

[illegible]

I don't know if the cold pin should be tied to GND or left floating. I leave them floating. It's easier to connect it to GND afterwards.

[illegible][illegible]

I couldn't find a 16 address multiplexer, so I only have a 6 address multiplexer, but we can still stack 16 board using either channels 1 to 4, or channels 5 to 8 at the same multiplexer address. (2 multiplexer share the same address but don't use the same channels)

I couldn't find a 16 address multiplexer.
So I only have 8 possible addresses, but we
can still stack 16 board using either
channels 1 to 4, or channels 5 to 8
at the same multiplexer address. (2 multiplexer share
the same address but don't use the same channels)