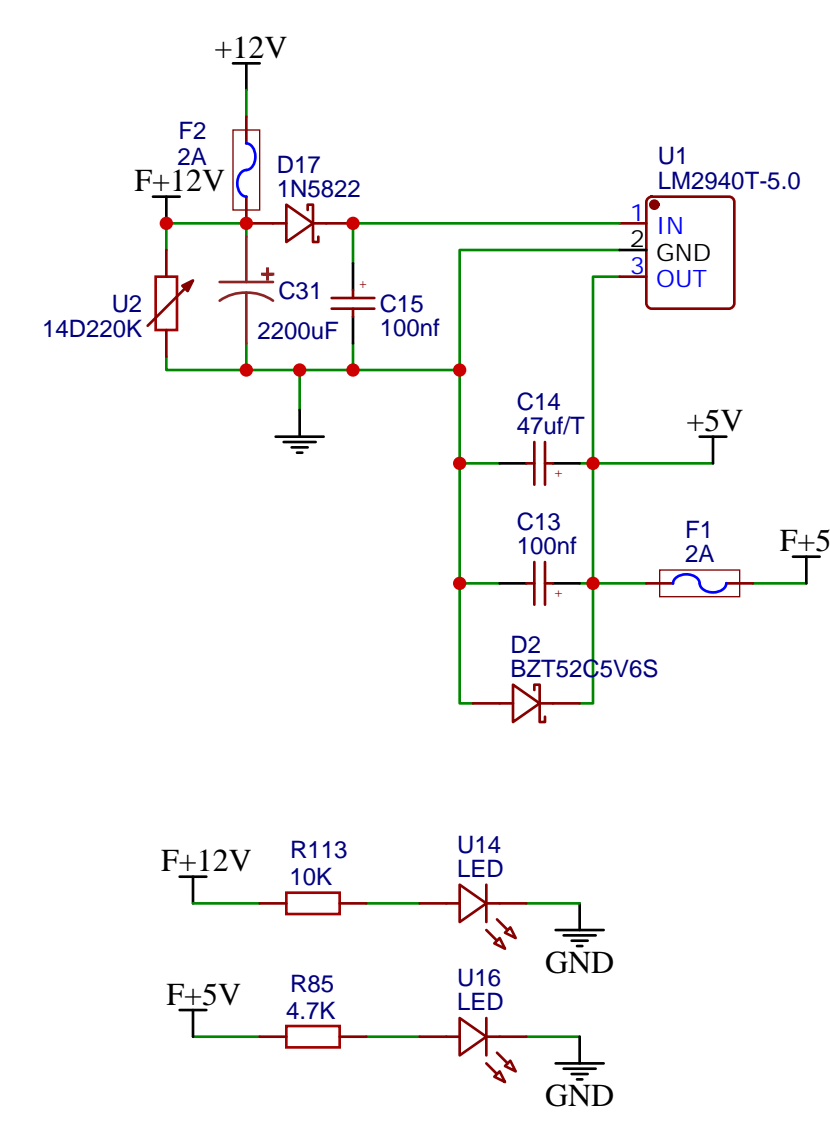


The diagram shows a 12V to 5V step-down converter. The input is 12V, connected to a 1400220C inductor (F2) and a 2200uF capacitor (C31). The inductor is connected to the LM2596T-5.0 IC (U1) via a 100mH inductor (L1). The IC is connected to a 5V output (F1) through a 100mH inductor (L2). The output is regulated at 5V by the LM2596T-5.0 IC. The circuit also includes a 100mH inductor (L3) and a 100mH inductor (L4) connected to the output. The output is connected to a 5V load (F1) through a 100mH inductor (L2). The circuit is powered by a 12V input and a 5V output.



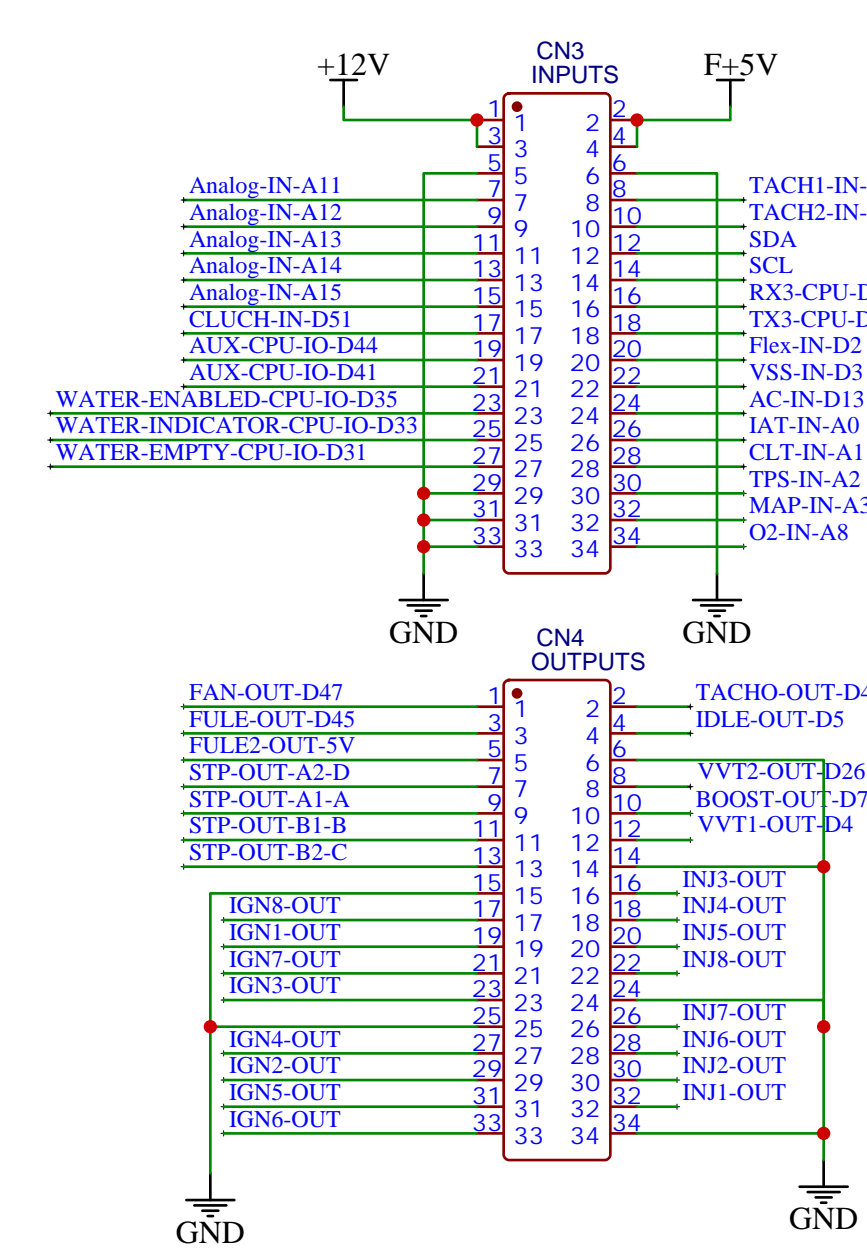
The diagram illustrates the pin connections for the STM32F103C8T6 microcontroller to a water level sensor module. The connections are as follows:

Top Section (Power and Data Pins):

- 12V Supply:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34.
- 5V Supply:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34.
- Ground:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34.
- Water Level Sensor Module Pins:**
 - WATER-LEVEL-SENSOR-CPIC-IO-D3: Connected to pin 1.
 - WATER-INDICATOR-CPIC-IO-D3: Connected to pin 2.
 - WATER-EMPTY-CPIC-IO-D3: Connected to pin 3.

Bottom Section (Status and Control Pins):

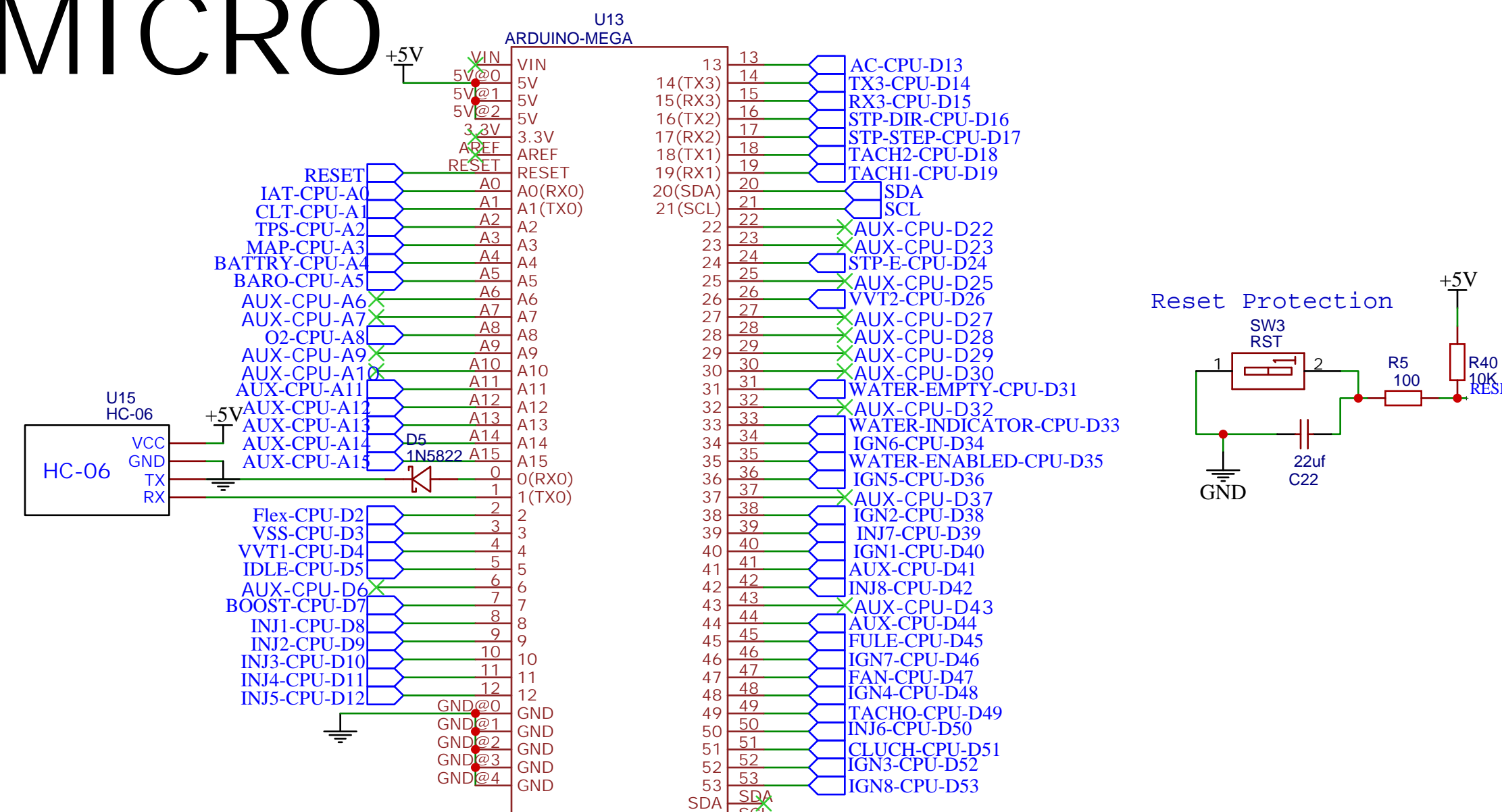
- 12V Supply:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34.
- 5V Supply:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34.
- Ground:** Connected to pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34.
- Water Level Sensor Module Pins:**
 - FAN-OUT-D47: Connected to pin 1.
 - FAN-OUT-D48: Connected to pin 2.
 - FAN-OUT-D49: Connected to pin 3.
 - FAN-OUT-D50: Connected to pin 4.
 - FAN-OUT-D51: Connected to pin 5.
 - FAN-OUT-D52: Connected to pin 6.
 - FAN-OUT-D53: Connected to pin 7.
 - FAN-OUT-D54: Connected to pin 8.
 - FAN-OUT-D55: Connected to pin 9.
 - FAN-OUT-D56: Connected to pin 10.
 - FAN-OUT-D57: Connected to pin 11.
 - FAN-OUT-D58: Connected to pin 12.
 - FAN-OUT-D59: Connected to pin 13.
 - FAN-OUT-D60: Connected to pin 14.
 - FAN-OUT-D61: Connected to pin 15.
 - FAN-OUT-D62: Connected to pin 16.
 - FAN-OUT-D63: Connected to pin 17.
 - FAN-OUT-D64: Connected to pin 18.
 - FAN-OUT-D65: Connected to pin 19.
 - FAN-OUT-D66: Connected to pin 20.
 - FAN-OUT-D67: Connected to pin 21.
 - FAN-OUT-D68: Connected to pin 22.
 - FAN-OUT-D69: Connected to pin 23.
 - FAN-OUT-D70: Connected to pin 24.
 - FAN-OUT-D71: Connected to pin 25.
 - FAN-OUT-D72: Connected to pin 26.
 - FAN-OUT-D73: Connected to pin 27.
 - FAN-OUT-D74: Connected to pin 28.
 - FAN-OUT-D75: Connected to pin 29.
 - FAN-OUT-D76: Connected to pin 30.
 - FAN-OUT-D77: Connected to pin 31.
 - FAN-OUT-D78: Connected to pin 32.
 - FAN-OUT-D79: Connected to pin 33.
 - FAN-OUT-D80: Connected to pin 34.



The diagram shows the pinout of the HC-06 module. The pins are numbered 1 to 30. The functions of the pins are listed in the table below.

Pin	Function
1	RES1
2	IAT-CPU-A
3	TFS-CPU-A
4	BATRY-CPU-A
5	AUX-CPU-A6
6	AUX-CPU-A7
7	OD-CPU-A
8	AUX-CPU-A2
9	AUX-CPU-A12
10	AUX-CPU-A1
11	AUX-CPU-A11
12	AUX-CPU-A10
13	AUX-CPU-A13
14	AUX-CPU-A14
15	AUX-CPU-A15
16	SW
17	RES2
18	RES3
19	RES4
20	RES5
21	RES6
22	RES7
23	RES8
24	RES9
25	RES10
26	RES11
27	RES12
28	RES13
29	RES14
30	RES15

The schematic shows the reset protection circuit. It includes a 5V supply, a 100k resistor (R5), a 22uF capacitor (C22), and a reset button (RST). The circuit is connected to the RES1 pin of the HC-06 module.



The schematic diagram illustrates the power supply section of the TMS320C6701 evaluation module. It features three voltage regulators: U44 (5V), U45 (1.2V), and U46 (1.2V). The 5V regulator (U44) is connected to the 5V pin of the TMS320C6701 and provides power to the BOOST-CPU-D7 pin. The 1.2V regulator (U45) is connected to the VVT1-OUT-D4 pin. The 1.2V regulator (U46) is connected to the VVT2-OUT-D26 pin and also provides power to the ILE-OUT-D5 pin. The diagram shows the internal connections of these regulators, including resistors (R69, R70, R71, R85, R82) and capacitors (C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100, C101, C102, C103, C104, C105, C106, C107, C108, C109, C110, C111, C112, C113, C114, C115, C116, C117, C118, C119, C120, C121, C122, C123, C124, C125, C126, C127, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C149, C150, C151, C152, C153, C154, C155, C156, C157, C158, C159, C160, C161, C162, C163, C164, C165, C166, C167, C168, C169, C170, C171, C172, C173, C174, C175, C176, C177, C178, C179, C180, C181, C182, C183, C184, C185, C186, C187, C188, C189, C190, C191, C192, C193, C194, C195, C196, C197, C198, C199, C200, C201, C202, C203, C204, C205, C206, C207, C208, C209, C210, C211, C212, C213, C214, C215, C216, C217, C218, C219, C220, C221, C222, C223, C224, C225, C226, C227, C228, C229, C230, C231, C232, C233, C234, C235, C236, C237, C238, C239, C240, C241, C242, C243, C244, C245, C246, C247, C248, C249, C250, C251, C252, C253, C254, C255, C256, C257, C258, C259, C260, C261, C262, C263, C264, C265, C266, C267, C268, C269, C270, C271, C272, C273, C274, C275, C276, C277, C278, C279, C280, C281, C282, C283, C284, C285, C286, C287, C288, C289, C290, C291, C292, C293, C294, C295, C296, C297, C298, C299, C300, C301, C302, C303, C304, C305, C306, C307, C308, C309, C310, C311, C312, C313, C314, C315, C316, C317, C318, C319, C320, C321, C322, C323, C324, C325, C326, C327, C328, C329, C330, C331, C332, C333, C334, C335, C336, C337, C338, C339, C340, C341, C342, C343, C344, C345, C346, C347, C348, C349, C350, C351, C352, C353, C354, C355, C356, C357, C358, C359, C360, C361, C362, C363, C364, C365, C366, C367, C368, C369, C370, C371, C372, C373, C374, C375, C376, C377, C378, C379, C380, C381, C382, C383, C384, C385, C386, C387, C388, C389, C390, C391, C392, C393, C394, C395, C396, C397, C398, C399, C400, C401, C402, C403, C404, C405, C406, C407, C408, C409, C410, C411, C412, C413, C414, C415, C416, C417, C418, C419, C420, C421, C422, C423, C424, C425, C426, C427, C428, C429, C430, C431, C432, C433, C434, C435, C436, C437, C438, C439, C440, C441, C442, C443, C444, C445, C446, C447, C448, C449, C450, C451, C452, C453, C454, C455, C456, C457, C458, C459, C460, C461, C462, C463, C464, C465, C466, C467, C468, C469, C470, C471, C472, C473, C474, C475, C476, C477, C478, C479, C480, C481, C482, C483, C484, C485, C486, C487, C488, C489, C490, C491, C492, C493, C494, C495, C496, C497, C498, C499, C500, C501, C502, C503, C504, C505, C506, C507, C508, C509, C510, C511, C512, C513, C514, C515, C516, C517, C518, C519, C520, C521, C522, C523, C524, C525, C526, C527, C528, C529, C530, C531, C532, C533, C534, C535, C536, C537, C538, C539, C540, C541, C542, C543, C544, C545, C546, C547, C548, C549, C550, C551, C552, C553, C554, C555, C556, C557, C558, C559, C560, C561, C562, C563, C564, C565, C566, C567, C568, C569, C570, C571, C572, C573, C574, C575, C576, C577, C578, C579, C580, C581, C582, C583, C584, C585, C586, C587, C588, C589, C590, C591, C592, C593, C594, C595, C596, C597, C598, C599, C600, C601, C602, C603, C604, C605, C606, C607, C608, C609, C610, C611, C612, C613, C614, C615, C616, C617, C618, C619, C620, C621, C622, C623, C624, C625, C626, C627, C628, C629, C630, C631, C632, C633, C634, C635, C636, C637, C638, C639, C640, C641, C642, C643, C644, C645, C646, C647, C648, C649, C650, C651, C652, C653, C654, C655, C656, C657, C658, C659, C660, C661, C662, C663, C664, C665, C666, C667, C668, C669, C670, C671, C672, C673, C674, C675, C676, C677, C678, C679, C680, C681, C682, C683, C684, C685, C686, C687, C688, C689, C690, C691, C692, C693, C694, C695, C696, C697, C698, C699, C700, C701, C702, C703, C704, C705, C706, C707, C708, C709, C710, C711, C712, C713, C714, C715, C716, C717, C718, C719, C720, C721, C722, C723, C724, C725, C726, C727, C728, C729, C730, C731, C732, C733, C734, C735, C736, C737, C738, C739, C740, C741

