PAN9320-PAN9420
Change Note
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1 SCOPE OF THIS DOCUMENT

This Change Note describes the applicable change on the customers application to transition from PAN9320 to PAN9420.

1.1 NEW PAN9420

The PAN9420 is an improved pin compatible full embedded Wifi Module designed for Wifi 802.11 b/g/n IoT applications.

Following key factors have been improved:

1. RF Frontend Design (SPDT switch between antenna and bottom pad)
2. Firmware (Additional Software features)
3. Operating temperature range (-40 to +85°C)
4. Increased flash memory size, 32Mbit, (no need for external flash)

Compatibility:

PAN9320, PAN9420 are footprint compatible.

Only two additional control pads have been added to switch between antenna or bottom pad RF output. If this two pins are not connected, antenna is used as RF output. The PAN9420 does not have a Bluetooth Coexistence interface and one GPIO less than PAN9320 (GPIO28). Due to the increased flash size of PAN9420 there is no need to mount an external QSPI flash. The operation temperature range of PAN9420 is enhanced from -40°C up to +85°C. Summerized, the PAN9320 footprint can be used without any changes for PAN9420 if antenna output is desired, all data is stored to internal QSPI flash, and if GPIO28 and Bluetooth Coexistence from PAN9320 were not in use.

PAN9320, PAN9420 are firmware compatible.

The firmware commands and basic structure is the same. Some commands have additional parameters due to improved feature setup. Based on the increased flash memory size, some additional software features will be added.
2 DETAILED DESCRIPTION

2.1 PIN OUT COMPARISON

Footprint PAN9420:

Footprint PAN9320:

SPDT V1 and SPDT V2 are control Pins for internal SPDT switch.

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### 3 HISTORY FOR THIS DOCUMENT

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Modification / Remarks</th>
</tr>
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<tbody>
<tr>
<td>0.10</td>
<td>14.07.2016</td>
<td>1st preliminary version</td>
</tr>
<tr>
<td>0.20</td>
<td>17.11.2016</td>
<td>changed pin out of PAN9420, removed QSPI pins -&gt; no support of external flash</td>
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4 GENERAL INFORMATION

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