**<Questions about AFE722>**

**-. TX path** (Resistor, RF Transformer & capacitor path path).

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| **Schematic of Alphean (Resistor path) - Default** | |
|  | \*. Questions  1. Could you check this schematic if there is any problem?  2. If there is no problem, which voltage level is VCM out? And what is the Compliance range?  \*. Full scale current = 20mA  \*. DAC\_C\_REF = **3.8V** |

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| **Schematic of Alphean (RF Transformer & capacitor path) - Optional** | |
|  | \*. Questions  1. Could you check this schematic if there is any problem?  2. If there is no problem, which voltage level is VCM out? And what is the Compliance range?  \*. Full scale current = 20mA  \*. DAC\_C\_REF = **3.0V** |
| <When RF Transformer path is used below components will be mounted>  -. R427, R428, R223, R251, R431, R432, R253, R252: 0ohm |
| < When Capacitor path is used below components will be mounted >  -. R427, R428, R223, R251, R431, R432, R253, R252: 0ohm  -. RF Transformer (T9 & T10): DNI  -. Capacitor (C197, C198, C199, C201): 0.1uF  -. R458, R459, R538, R539, R460, R461, R540, R541: 10Kohm |

**-. RX path** (using RF Transformer & not using RF Transformer)

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| **Schematic of Alphean** | |
|  | \*. Questions  1. Could you check this schematic if there is any problem? |
| <Mounted components when not using RF Transformer >  -. This schematic |
| < Mounted components when using RF Transformer>  -. R238, R239, R264, R273: DNI  -. R234, R236, R240, R249: 0ohm |

**-. Transceiver spec:**

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| **RX Parameter** | **Specification** | | | **Unit** |
| **Min.** | **Typ.** | **Max.** |
| Output common mode voltage  (Common mode voltage is supplied by the transceiver) | 1.4 | 1.5 | 1.6 | V |
| Output differential peak-to-peak output voltage |  |  | 2.5 | Vppd |

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| **TX Parameter** | **Specification** | | | **Unit** |
| **Min.** | **Typ.** | **Max.** |
| Input resistance |  | >100 |  | Kohm |
| Input capacitance |  | <10 |  | pF |
| Input common mode voltage5  (Common voltage is supplied from external.) | 1.4 | 1.5 | 1.6 | V |
| Input differential peak-to-peak input voltage |  | 1.00 | 2.00 | Vppd |