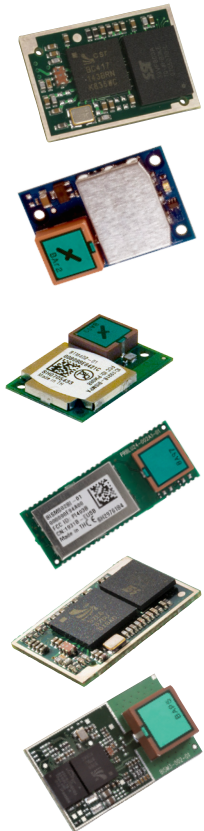


# Bluetooth® Module Line Card

## PRE-APPROVED BLUETOOTH® MODULES WITH INTEGRATED STACKS AND PRO-

- All modules are Bluetooth-approved
  - 410, 420, 430, 510, 520 limited modular approval
  - Others have full modular approval
- Robust, comprehensive AT command set for simple control
- Best-in-class range and power consumption
- Development kits available for all modules
- Fastest time to market



| APPLICATION              | BT DATA  | BISM2  | BISM2 PA   | BISM2 SM   | BT AUDIO                                    | BT MULTIMEDIA   |
|--------------------------|--|--|--|--|---|---|
|                          | DATA / PCM VOICE   | DATA / PCM VOICE   | DATA / PCM VOICE   | DATA / PCM VOICE   | HANDSFREE                                   | STEREO AUDIO  |
| Bluetooth Spec           | 2.1+EDR (BTM41X/42X)<br>2.0 (BTM43X)   | 2.0  | 2.0  | 2.0  | 2.1+EDR                                     | 2.1+EDR   |
| Range                    | 50m  | 250m   | 1km  | 250m   | 50m   | 300m  |
| Size (mm)                | 12.5 x 18.0 x 1.6<br>(410/420)   | 25 x 35 x 8  | 25 x 35 x 8  | 25 x 35 x 8  | 14 x 20 x 1.6 (510)                         | 25 x 35 x 8   |
| Temp Range               | -30°C tp +70°C   | -40°C to +85°C   | -10°C to +85°C   | -40°C to +85°C   | -30°C to +70°C                              | -30°C to +70°C  |
| Connection               | SMT  | 40 pin Hirose  | 40 pin Hirose  | SMT  | SMT   | SMT   |
| Antenna                  | Integrated*  | Integrated*  | Integrated*  | Integrated*  | Integrated*                                 | Integrated*   |
| UART Throughput          | 300kbps  | 300kbps  | 300kbps  | 300kbps  | 300kbps                                     | 300kbps   |
| Data / Control           | UART   | UART   | UART   | UART   | UART  | UART  |
| GPIO                     | 2  | 9  | 9  | 9  | 8   | 16  |
| ADC                      | 0  | 2  | 2  | 2  | 0   | 2   |
| AUDIO                    | PCM (SCO, eSCO)  | PCM (SCO, eSCO)  | PCM (SCO, eSCO)  | PCM (SCO, eSCO)  | PCM (SCO, eSCO)<br>Stereo Codec             | PCM (SCO, eSCO)<br>Stereo Codec                             |
| DSP                      | No   | No   | No   | No   | Kalimba                                     | Kalimba   |
| Profiles **              | GAP, SDAP, SPP<br>Also available on<br>BTM43X: FTP Client,<br>HFP (Partial), DUN<br>(Partial), GOEP Client,<br>OPP Client, HFP-AG,<br>HSP-AG | SPP, FTP Client, HFP<br>(partial), HSP (partial),<br>DUN (partial), GOEP Client,<br>OPP Client, HFP-AG,<br>HSP-AG, GAP, SDAP | SPP, FTP Client, HFP<br>(partial), HSP (partial),<br>DUN (partial), GOEP Client,<br>OPP Client, HFP-AG,<br>HSP-AG, GAP, SDAP | SPP, FTP Client, HFP<br>(partial), HSP (partial),<br>DUN (partial), GOEP Client,<br>OPP Client, HFP-AG,<br>HSP-AG, GAP, SDAP | GAP, SDAP, SPP, A2DP,<br>AVRCP, HSP,<br>HFP | GAP, SDAP, SPP, A2DP,<br>AVRCP, HSP, HFP, PBAP,<br>SCO/eSCO |
| Communications Interface | AT Command Set<br>(410 / 411 / 430 / 431)  | AT Command Set   | AT Command Set   | AT Command Set   | AT Command Set                              | AT Command Set  |
| I/O Voltage Level        | User-Programmable  |  |  |  | User-Programmable                           | User-Programmable   |
| 3.3V                     |  | TRBLU23-0200   | BTM402   | BISM502BI  |   |   |
| 3.0V                     | BTM410 / 411 (AT)<br>BTM420 / 421 (HCI)<br>BTM430 / 431 (AT)   | BTM403   | BTM404   |  | BTM510<br>BTM511                            | BTM520<br>BTM521  |

\*External antenna option available

\*\*Please ask about other profiles available

For more information contact  
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