

SBIR 06.2 PHASE I - AWARD DETAILS	
ORGANIZATION	TARDEC
TOPIC NUMBER	A06-222
CONTRACT NUMBER	
YEAR OF AWARD	
AWARD START DATE	
AWARD COMPLETION DATE	
PROPOSAL NUMBER	A062-222-0710
TITLE	Mobile Embedded Component Suite (MECS)
PROJECT MANAGER	John Cunningham (860) 233-1526 jc@bandxi.com
COMPANY	Band XI International, Inc. 150 Beacon Hill Drive West Hartford CT 06117-1006 Minority Owned: No Veteran Owned: No Number of Employees: 3
KEYWORDS	Embedded Java, OSGi, Bitmap UI, Messaging, Device Abstraction, Java, Eclipse
ABSTRACT	Band XI International will architect, design, develop and document an Equinox/OSGi based embedded component suite that addresses the need for tight, efficient, and usable: (1) bitmap oriented user interface framework, (2) pluggable off board messaging framework, and (3) device connection framework. Band XI will develop these components in an agile manner, driven by real scenarios and through a transparent and continuous build process. We will employ a specification by reference implementation approach, wherein any specifications, designs, or architecture decisions are supported by a running reference implementation to prove their viability. All development will be done with the Eclipse IDE and new tooling plugins will be added as necessary to improve the usability of the frameworks. Band XI International offers nearly a decade of experience in developing embedded Java applications that rely on a loosely coupled, highly cohesive component model. Band XI engineers have deep experience working with similar proprietary components and frameworks and know their comparative strengths and weaknesses. As a member of the Eclipse Foundation and the Open Services Gateway Initiative (OSGi), Band XI can call upon the breath and depth of those communities for validation and assistance in bringing the Mobile Embedded Component Suite to fruition.
BENEFITS	Open source contributions to areas of bitmapped, industrial user interfaces, service oriented device interface architecture, and transport independent messaging between systems. We will develop a community of developers under the aegis of the Eclipse Foundation to further an open source mobile embedded component suite and tooling that enables rapid development and deployment of applications built with it. Band XI will offer training, education, mentoring, and custom systems development focused on the work products of this effort.